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## University of North Carolina Extension Bulletin

AGRICULTURAL GRAPHICS:
NORTH CAROLINA AND THE UNITED STATES
1866-1922

By H. R. SMEDES

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AGRICULTURAL GRAPHICS:<br>NORTH CAROLINA AND THE UNITED STATES

1866-1922

## By HENRIETTA R. SMEDES

LIBRARIAN AND LABORATORY ASSISTANT DEPARTMENT RURAL SOCIAL ECONOMICS UNIVERSITY OF NORTH CAROLINA

The well-being of a people is like a tree; agriculture is its root, manufacture and commerce are its branches and its life; if the root is injured the leaves fall, the branches break away, and the tree dies.-Chinese Philosopher.

Agriculture is not only an occupation which some individuals follow for profit, it is a great national interest determining in a dominant way the fortunes of the nation and the opportunities and the character of the populations.-Dr. James W. Robertson.

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# AGRICULTURAL GRAPHICS: NORTH CAROLINA AND THE UNITED STATES 

1866-1922

This bulletin presents the results of several years of painstaking and minute research in government crop and live stock statistics. The figures upon which the charts and graphs are based are all official figures-returns of the federal Bureau of the Census for census years and estimates of the United States Department of Agriculture for intervening years.

Throughout the bulletin census figures are given in italics. The Department of Agriculture's estimates are based primarily on census figures carried forward from year to year through percentage estimates made on the basis of returns from a host of crop reporters and field agents, and every possible side-light on the problems considered is utilized by the Department in its estimates. However there is an unavoidable tendency towards cumulative error in estimates of acreage as the distance from the actual census year increases, and consequently the estimates for the later years in the inter-census periods are apt to show considerable variation from the actual census figures when these become available. The Department of Agriculture has in some instances revised its original estimates for such years, so as to conform more nearly to ascertained fact; and in all cases where revisions have been made the latest estimates are here used. In census years the Department of Agriculture's estimates, made prior to the taking of the census, are shown in addition to the census figures, so as to exhibit the extent of the variation between the estimates of the Department of Agriculture and the actual census figures. The department officials have been most kind in supplying, upon request, copies of hitherto unpublished data from office records, and the writer, who was for many years employed in close association with statistical experts of the present Bureau of Agricultural Economics, has had the training requisite for the handling of such material.

The fifty-seven-year period covered, 1866 to 1922, is that for which an unbroken series of comparable statistics can be supplied. The findings pointed out in this bulletin are such as are plainly revealed by even a superficial examination of the statistics presented. These statistics will repay further close study. They can be used in many ways in working towards solving our various state agricultural and industrial problems.

The points covered are:

## I. Crops

1. Aggregate value of crops: North Carolina and the United States, 1909-1922. Table I.

Chart 1. Percent of United States aggregate crop values produced in North Carolina, 1909-1922.

Chart 2. Increase in aggregate crop values over 1909, North Carolina and the United States, 1909-1922.
2. Aggregate crop values, five-year average, 1917-1921:

Chart 3. Proportion of aggregate United States crop values produced in the five leading states and in North Carolina.

Chart 4. Proportion of aggregate United States crop values represented by important crops.

Chart 5. Proportion of aggregate North Carolina crop values represented by the same crops.
3. Proportion of important crops produced in the five leading states and in North Carolina, five-year average 1917-21.

Charts 6 to 13 -corn, wheat, oats, potatoes, sweet potatoes, hay, cotton, and tobacco.
4. Acreage, yield per acre, total production, farm price per unit December 1, total value, and value per acre of important crops, North Carolina and the United States, 1866-1922. Tables II to IX.

Corn: Trends in yield per acre, farm price per bushel, and value per acre. Table II and charts 14 to 16.

Wheat: Trends in yield per acre, farm price per bushel, and value per acre. Table III and charts 17 to 19.

Oats: Trends in yield per acre, farm price per bushel, and value per acre. Table IV and charts 20 to 22 .

Irish potatoes: Trends in yield per acre, farm price per bushel, and value per acre. Table V and charts 23 to 25 .

Sweet potatoes: Trends in yield per acre, farm price per bushel, and value per acre. Table VI and charts 26 to 28.

Hay, tame: Trends in yield per acre, farm price per ton, and value per acre. Table VII and charts 29 to 31.

Cotton: Trends in yield per acre, farm price per pound, and value per acre. Table VIII and charts 32 to 34 .

Tobacco: Trends in yield per acre, farm price per pound, and value per acre. Table IX and charts 35 to 37 .
5. Other crops.

## II. Livestock

1. Number, farm price per head January 1, and total value for farm animals, North Carolina and the United States, 18671923. Tables X to XII.

Horses and Mules: Trends in farm price per head. Table X and charts 38 and $3 \overline{9}$.

Milk Cows and Other Cattle: Trends in farm price per head. Table XI and charts 40 and 41.

Sheep and Swine: Trends in farm price per head. Table XII and charts 42 and 43.

## III. Food Production

1. Food production as compared with population. Tables XIII and XIV and charts 44 and 45.
2. General considerations.

## I, Cropis

1. Aggregate value of crops: North Carolina and the United States, 1909-1922.

The figures presented in table 1 and charts 1 and 2 are more suggestive than authoritative.

The Department of Agriculture's hypothetical estimates of aggregate crop values are based on the assumption that the several crops whose production the department estimates from year to year (at present some twenty-two in number) represent each year the same proportion of total crop values that they represented in the previous census year. This is only roughly true, and any unusual or disproportionate increase or decrease in the value of some particular crop distorts the reliability of the esti-

> TABLE I-AGGREGATE VALUE OF CROPS:
> N. C. AND U.S., $1909-1922$

mated aggregate. However, such distortions tend to neutralize one another in considering averages for a series of years, and therefore the figures exhibited may be used as a rough measuring rod in determining our progress in the production of crop values.

It will be noted (chart 1) that whereas in 1909 North Carolina's crops represented only 2.5 percent of the total United States crop values, in 1922 they had risen to 4.0 percent of the total. Furthermore, the upward trend, as shown by using a series of moving averages for five-year periods, has been absolutely unmistakable and perfectly regular, with marked acceleration in the later years.

That we are indeed a favored people is shown strikingly in chart 2. Here the percent of increase from year to year in aggregate crop values in North Carolina over our 1909 crop values is shown in comparison with the similar percent of increase in the United States. The 1909 figures for the state and for the United States are taken as a starting point, and the percent of gain in North Carolina is unfailingly much above the percent of gain in the United States. Had the United Stater as a



CHART 2.-INCREASE IN AGGREGATE CROP VALUES
OVER 1909 VALUES: N. C. AND THE U. S., 1909-1922
whole gained as much as North Carolina has in crop values since 1909, the aggregate for the United States in 1922 would have been over thirteen and a half billion dollars, instead of eight and a half billions.
2. Aggregate crop values, five-year average 1917-21.

Chart 3 skows our standing and that of the leading five states in crop values for the five-year period 1917-21. We have not yet maintained our values for a period long enough to admit us to the ranks of the leading five states in an average covering five years; but the 1922 figures show that we were within the fold of the elect last year, and it seems likely that we may retain the rank we have reached in recent years. All 1922 figures are subject to revision in December, 1923, therefore they have not been used in the averages here given.

Charts 4 and 5 show an interesting contrast between the crops that have made the fortune of the United States as a whole and those that have raised North Carolina into prominence. The eight crops considered (corn, wheat, oats, potatoes, sweet potatoes, hay, cotton and tobacco) for the five-year period 1917-21


CHARTS 6 TO 13.-PROPORTION OF IMPORTANT CROPS PRODUCED
IN THE FIVE LEADING STATES AND IN NORTH CAROLINA


CaRN U.S
Five-Year Average Production 1917 -1921 $=2.931 .271 .000$ Bushels or $1000 \%$


NHEAT U.S.
Five-Year Average Production 1917 -1921 $=834,801,000$ Bushels or $100.0 \%$


OATS U.S.
Five-Year Average Production $1917-1921=1,377,903,000$ Bushels or $100.0 \%$


Potatoes U.S.
Five-Year Average Production 1917-1921 $=388.358,000$ Bushels or 100.0\%


Sweet Potatoes, U.S.
Five-year Average Production 1917 -1921 $=94,290,000$ bushels $=100.0 \%$


HAY(TAME).U.S
Five-Year Averfige Production 1917 - $1921=83,312.000$ Tons $=100.0 \%$


Cotton, U.S
Five-Year Average Production $1917-1921=11,232,000$ Bales $=100.0 \%$

Kentucky 32.7\%


Tobacco, U.S.
Five-Year Average Projuction $1917-1921=1,361,149,000$ Pounds $=100.0 \%$
represented in the United States, considered as a whole, 75.7 percent of the aggregate crop values, and in North Carolina 79.6 percent of such aggregate values. But in the United States at large the food and feed crops furnished by far the greater proportion of the values, whereas in North Carolina the only food crop that constitutes any considerable percentage of the total state crop values is corn-19 percent, while tobacco and cotton together represent 48.5 percent of the aggregate.
3. This point is further emphasized in charts 6 to 13, which show the proportion of important crops produced in the leading states and in North Carolina, on the basis of their five-year averages 1917-21. When the different crops are distributed according to the states which furnished the largest percentages, it is seen at a glance that sweet potatoes are the only food crop of which we furnish any considerable proportion in the United States total production. Our corn crop, which accounts for 19 percent of our own aggregate crop values, represents only 1.9 percent of the total corn crop of the country, whereas we produce 10.4 percent of the total sweet potato crop and nearly a quarter of the tobacco crop of the United States. Sweet potatoes and tobacco are the two crops in whose production we stand among the leading five states on a five-year average, 1917-21. Figures for 1922 and 1921 show us among the first five states in cotton as well, but how long we can maintain this position now that the boll weevil has gotten us into his clutches remains to be seen.
4. Tables II to IX and charts 14 to 37 present details of the crops of corn, wheat, oats, potatoes, sweet potatoes, hay, cotton, and tobacco in North Carolina and the United States from 1866 to 1922. These tables and charts constitute a statistical history of these particular crops for the entire period for which consecutive data are available. The estimates of acreage and production shown may not in particular years represent closely actual facts, but they are fairly comparable and they do represent the results of the Government's best effort to ascertain these facts. Where federal department officials have found it possible at a later date to amend the estimates originally made, revisions have been substituted for the original figures, so that the statistics given represent the best available information in
these matters. The federal government has had in mind for some time further revision of some of the earlier estimates of acreage (and of production, as a consequence), but so far this work has not been consummated. A committee of statistical experts, composed of Carroll W. Doten of the Boston Institute of Technology, Prof. Warren M. Persons of Harvard, W. I. King of the Bureau of Business Research of New York, and Dr. G. F. Warren, of Cornell University, has examined very recently the statistical work of the U. S. Department of Agriculture and recommended the revision and publication for all states of such historical records of acreage, production, and livestock as we are giving here for North Carolina. As a matter of fact, however, it is not always possible for the Government to carry out promptly recommendations of this kind, though eventually they may be acted upon. This fact has been borne in mind in the preparation of the present bulletin, and accordingly only such charts and graphs have been presented as will be affected very little, if at all, by any future revisions of acreage, production, or livestock figures. Estimates of yield per acre, of farm price per unit, and the resultant figure-value per acre, will remain practically unchanged in spite of revisions of individual acreage figures in some years.

The failings inherent in estimates of acreage and production have furnished an additional reason for basing our graphs on per-acre and per-unit figures rather than on totals. The per-acre and per-unit figures are not subject to the cumulative error which is apt to be present in the estimates of acreage and production; and, furthermore, they are rendered more reliable by the unerring nature of the law of averages. That is to say, they are based on a very large number of estimates, similarly made from year to year and properly distributed so as to constitute them reliable samples. For this reason, considerable reliance may be placed upon them.

Examining the charts presented, it may be noted that in every crop shown there is a marked trend towards increased yield per acre in the United States; and this is true also in North Carolina for all crops with the exception of hay and Irish potatoes. Both these crops are at present on the upward path in

TABLE II--CORN

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { M } \\ & \text { D } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 186 | ,805 | 12.0 | 21,657 | 78 | 16,867 | 9.36 | 34,307 | 25.3 | 867,946 | 47.4 | 411,451 | 11.99 |
| 1867 | 1,549 | 11.6 | '17,974 | 74 | 13,390 | 8.58 | 32,520 | 23.6 | 768,320 | 57.0 | 437,770 | 13.46 |
| 1868 | 1,634 | 14.3 | 23,366 | 58 | 13,561 | 8.29 | 34,887 | 26.0 | 906,527 | 46.8 | 424,057 | 12.16 |
| 1869 | 1,176 | 14.8 | 17,400 | 79 | 13,788 | 11.63 | 37,103 | 23.6 | 874,320 | 59.8 | 522,551 | 14.08 |
| 1869 |  |  | 18,454 |  |  |  |  |  | 760,945 |  |  |  |
| 1870 | 1,541 | 14.6 | 22,500 | 70 | 15,754 | 10.22 | 38,647 | 28.3 | 1,094,255 | 49.4 | 540,520 | 13.99 |
| 1871 | 1,479 | 14.0 | 20,700 | 64 | 13,217 | 8.96 | 34,091 | 29.1 | 991,898 | 43.4 | 430,356 | 12.62 |
| 1872 | 1,501 | 16.0 | 24,012 | 55 | 13,186 | 8.80 | 35,52\% | 30.8 | 1,092,719 | 35.3 | 385,736 | 10.86 |
| 1873 | 1,488 | 14.2 | 21,130 | 59 | 12,452 | 8.38 | 39,197 | 23.8 | 932,274 | 44.2 | 411,961 | 10.51 |
| 1874 | 1,353 | 16.4 | 22,186 | 65 | 14,404 | 10.65 | 41,037 | 20.7 | 850,148 | 58.4 | 496,271 | 12.09 |
| 1875 | 1,485 | 15.0 | 22,275 | 52 | 11,652 | 7.80 | 44,841 | 29.5 | 1,321,069 | 36.7 | 484,675 | 10.81 |
| 1876 | 1,575 | 14.6 | 23,000 | 49 | 11,384 | 7.15 | 49,033 | 26.2 | 1,283,828 | 34.0 | 436,109 | 8.89 |
| 1877 | 1,629 | 14.0 | 22,800 | 51 | 11,533 | 7.14 | 50,369 | 26.7 | 1,342,558 | 34.8 | 467,635 | 9.28 |
| 1878 | 1,662 | 13.6 | 22,603 | 45 | 10,151 | 6.12 | 51,585 | 26.9 | 1,388,219 | 31.7 | 440,281 | 8.54 |
| 1879 | 2,305 | 15.0 | 34,575 | 58 | 20,054 | 8.70 | 62,369 | 29.2 | 1,823,163 | 37.1 | 676,251 | 10.84 |
| 1879 | 2,305 | 12.2 | 28,020 |  |  |  | 62,369 | 28.1 | 1,754,592 |  |  |  |
| 1880 | 2,253 | 16.4 | 36,954 | 52 | 19,216 | 8.53 | 62,318 | 27.6 | 1,717,435 | . 39.6 | 679,714 | 10.91 |
| 1881 | 2,308 | 11.7 | 26,977 | 79 | 21,312 | 9.24 | 64,262 | 18.6 | 1,194,916 | 63.6 | 759,482 | 11.82 |
| 1882 | 2,446 | 14.0 | 34.261 | 53 | 18,158 | 7.42 | 65,660 | 24.6 | 1,617,025 | 48.5 | 783,867 | 11.94 |
| 1883 | 2,495 | 11.5 | 28,692 | 65 | 18,650 | 7.48 | 68,302 | 22.7 | 1,551,067 | 42.4 | 658,051 | 9.63 |
| 1884 | 2,520 | 12.5 | 31,499 | 60 | 18,899 | 7.50 | 69,684 | 25.8 | 1,795,528 | 35.7 | 640,736 | 9.19 |
| 1885 | 2,545 | 9.9 | 25,199 | 55 | 13,859 | 5.44 | 73,130 | 26.5 | 1,936,176 | 32.8 | 635,675 | 8.69 |
| 1886 | 2,596 | 10.5 | 27,215 | 57 | 15,513 | 5.98 | 75,694 | 22.0 | 1,665,441 | 36.6 | 610,311 | 8.06 |
| 1887 | 2,674 | 13.4 | 35,830 | 59 | 21,140 | 7.91 | 72,393 | 20.1 | 1,456,161 | 44.4 | 646,107 | 8.93 |
| 1888 | 2,674 | 10.6 | 28,343 | 58 | 16,439 | 6.15 | 75,673 | 26.3 | 1,987,790 | 34.1 | 677,562 | 8.95 |
| 1889 | 2,361 | 12.0 | 28,332 | 53 | 15,016 | 6.36 | 72,088 | 27.7 | 1,998,648 | 27.4 | 546,984 | 7.59 |
| 1889 | ,261 | 10.9 | 25,784 |  |  |  | 72,088 | 29.4 | 2,122,328 |  |  |  |
| 1890 | 2,320 | 13.3 | 30,856 | 55 | 16,971 | 7.32 | 70,390 | 20.7 | 1,460,406 | 50.0 | 729,647 | 10.37 |
| 1891 | 2,280 | 14.1 | 32,148 | 58 | 18,646 | 8.18 | 74,496 | 27.6 | 2,055,823 | 39.7 | 816,917 | 10.97 |
| 1892 | 2,200 | 10.2 | 22,440 | 54 | 12,118 | 5.51 | 72,610 | 23.6 | 1,713,688 | 38.8 | 664,390 | 9.15 |
| 1893 | 2,200 | 12.3 | 27,060 | 50 | 13,530 | 6.15 | 74,434 | 22.9 | 1,707,572 | 35.9 | 612,998 | 8.24 |
| 1594 | 2,300 | 13.4 | 30,820 | 47 | 14,485 | 6.30 | 69,396 | 19.3 | 1,339,680 | 45.1 | 604,523 | 8.71 |
| 1895 | 2,450 | 14.5 | 35,525 | 38 | 13,500 | 5.51 | 85,567 | 27.0 | 2,310,952 | 25.0 | 578,408 | 6.76 |
| 1896 | 2,470 | 12.0 | 29,640 | 37 | 10,967 | 4.44 | 86,560 | 28.9 | 2,503,484 | 21.3 | 532,884 | 6.16 |
| 1897 | 2,450 | 13.0 | 31,850 | 43 | 13,696 | 5.59 | 88,127 | 24.3 | 2,144,553 | 26.0 | 558,309 | 6.34 |
| 1898 | 2,580 | 14.0 | 36,120 | 43 | 15,532 | . 6.02 | 88,304 | 25.6 | 2,261,119 | 28.4 | 642,747 | 7.28 |
| 1899 | 2,720 | 13.0 | 35,360 | 47 | 16,619 | 9 6.11 | 94,914 | 25.9 | 2,454,626 | 29.9 | 734,917 | 7.74 |
| 1899 | 2,720 | 12.8 | 34, 819 |  |  |  | 94,914 | 28.1 | 2,666,324 |  |  |  |
| 1900 | 2,675 | 12.0 | 32,100 | 57 | 18,297 | 6.84 | 95,042 | 26.4 | 2,505,148 | 35.1 | 878,243 | 9.24 |
| 1901 | 2,575 | 12.0 | 30,900 | 73 | 22,557 | 8.76 | 94,636 | 17.0 | 1,607,288 | 60.0 | 964,543 | 10.19 |
| 1902 | 2,700 | 13.9 | 37,530 | 60 | 22,518 | 8.34 | 95,517 | 27.4 | 2,620,699 | 40.0 | 1,048,735 | 10.98 |
| 190 | 2,570 | 14.7 | 37,779 | 61 | 23,045 | 8.97 | 90,661 | 25.8 | 2,339,417 | 42.1 | 984,173 | 10.86 |
|  | 2,550 | 15.2 | 38 | 62 | 24,031 | 19.42 | 93,340 | 27.0 | 2,520,682 | 43.7 | 1,101,430 | 11.80 |
| 1905 | 2,500 | 13.9 | 34,750 | 64 | 22,240 | - 8.90 | 93,573 | 29.3 | 2,744,329 | 40.7 | 1,116,817 | 11.94 |
| 1906 | 2,500 | 15.3 | 38,250 | 68 | 26,010 | 10.40 | 93,643 | 30.9 | 2,895,822 | 39.2 | 1,135,969 | 12.13 |
| 1907 | 2,500 | 16.5 | 41,250 | 74 | 30,525 | 12.21 | 94,971 | 26.5 | 2,512,065 | 50.9 | 1,277,607 | 13.45 |
| 1908 | 2,450 | 18.0 | 44,100 | 79 | 34,839 | 14.22 | 95,603 | 26.6 | 2,544,957 | 60.0 | 1,527,679 | 15.98 |
| 1909. | 2,459 | 16.8 | 41,311 | 85 | 35,114 | 14.2 | 98,383 | 26.1 | 2,572,336 | 58.6 | 1,507,185 | 15.32 |
| 1909 | 2,459 | 13.8 | 34,064 |  |  |  | 98,383 | 25. | 2,552,190 |  |  |  |
| 1910 | 2.650 | 18.6 | 49,290 | 76 | 37,460 | 14.14 | 104,035 | 27.7 | 2,886,260 | 48.0 | 1,384,817 | 13.31 |
| 1911 | 2,700 | 18.4 | 49,680 | 82 | 40,738 | 15.09 | 105,825 | 23.9 | 2,531,488 | 61.8 | 1,565,258 | 14.79 |
| 1912 | 2,808 | 18.2 | 51,106 | 83 | 42,418 | 15.11 | 107,083 | 29.2 | 3,124,746 | 48.7 | 1,520,454 | 14.20 |
| 1913 | 2,835 | 19.5 | 55,282 | 88 | 48,648 | 17.16 | 105,820 | 23.1 | 2,446,988 | 69.1 | 1,692,092 | 15.99 |
| 1914 | 2,835 | 20 | 57,550 | 86 | 49,493 | 17.46 | 103,435 | 25. | 2,672,804 | 64.4 | 1,722,070 | 16.65 |
| 1915 | 2,900 | 21.0 | 60,900 | 77 | 46,893 | 16.17 | 106,197 | 28.2 | 2,994,793 | 57.5 | 1,722,680 | 16.22 |
| 1916 | 2,600 | 18.5 | 48,100 | 110 | 52,910 | 20.35 | 105,296 | 24.4 | 2,566,927 | 88.9 | 2,280,729 | 21.66 |
| 1917 | 2,920 | 20.0 | 58.400 | 170 | 90,280 | 34.00 | 116,730 | ${ }_{2}^{26.3}$ | 3,065,233 | 127.9 | 3,920,228 | 33.58 |
| 1918 | 3,030 | 21.0 | 63,630 | 177 | 112,625 | 37.17 | 104,467 | 24.0 | 2,502,665 | 136.5 | 3,416,240 | 32.70 |
| 1919* | 2,531 | 19.0 | 48,089 | 185 | 88,965 | 35.15 | 97,170 | 28.9 | 2,811,302 | 134.5 | 3,780,597 | 38.91 |
| 1919 | 2,311 | 17.7 | 40,998 |  |  |  | 87,772 | 26.7 | 2,345,833 |  |  |  |
| 1920 | 2,428 | 22.5 | 54,630 | 113 | 61,732 | 25.42 | 101,699 | 31.5 | 3,208,584 | 67.0 | 2,150,332 | 21.14 |
| 1921 | 2,552 | 19.3 | 49,254 | 78 | 38,418 | 15.05 | 103,740 | 29.6 | 3,068,569 | 42.3 | 1,297,213 | 12.50 |
| 192 | 2,52 | 20.0 | 50,520 | - 89 | 44,963 | 317.80 | 102,428 | 28.2 | 2,890,712 | 65.7 | 1,900,287 | 18.55 |

[^0]


CHART 15.-CORN: FARM PRICE, N. C. AND U. S.

Dollars per Acre

yield per acre in North Carolina, but they have not yet reached their earlier level.

Looking at the charts in detail, we may observe a number of intereșing points.

Corn. The enormous difference between our yield per acre of corn and the yield in the United States as a whole is strikingly shown in chart 14. But it is also shown that we have made a much greater gain in yield per acre than the country as a whole has made, and the gulf fixed between our average yield and the United States average seems to be steadily decreasing. The United States average yield per acre for the ten-year period 1913-22 was 27.00 bushels, as compared with 26.07 bushels for the decade 1886-75-a gain of 3.6 percent; whereas in North Carolina the yield in the later period was 20.11 bushels per acre and in the earier period 14.29 bushels-a gain of 40.7 percent.

As a consequence of the smallness of our yield, our farm price per bushel has been consistently higher than the United States average (chart 15) ; and though our yield has been increasing, our farm price per bushel has also maintained an upward trend. The result is that our value per acre, after being for a long period below the United States average, has in recent years risen above the United States average value per acre. This is shown in chart 16 . This achievement is the result of our increased yield per acre rather than of our increased price per bushel. There is very litttle difference in the percentage of increase in price per bushel of corn in North Carolina and the United States, as is shown by the fact that the percentage gain in price per bushel, comparing the ten-year average for 1913-22 with the ten-year average for 1866-75, was 79.4 in North Carolina and 78.5 in the United States. But at the same time, because of our increased yield, comparing the two decades 1913-22 and 1866-75, the North Carolina increase in value per acre is shown to be 154.2 percent, while the United States gain was only 8.95 percent.

Wheat. Our wheat crop comprises only a very small pro-portion-seven-tenths of one percent-of the total United States wheat crop. However, as in the corn crop-though not to so great an extent-we seem to be gaining on the United States in the percentage increase in yield per acre (chart 17). Comparing the per-acre yields in the two decades 1913-22 and 1866-75

TABLE III-WHEAT

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { H } \\ & \underset{\sim}{\infty} \end{aligned}$ |  |  |  |  |  |  | $\left\lvert\, \begin{gathered} 0 \\ \pi \\ 0 \\ 0 \\ 0 \\ u \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 4 \\ 4 \\ 0 \end{gathered}\right.$ |  |  |  |  |  |
| 1866 | 491 | 5.8 | 2,84 | 189 | 5,384 | 10.9 | 15, | 9.9 | 152,000 | 152.7 | 232,110 | 15.05 |
| 1867 | 495 | 6.9 | 3,415 | 151 | 5,162 | 10.42 | 18, | 11.6 | 212,441 | 145.2 | 308,387 | 16.83 |
| 1868 | 504 | 5.9 | 2,971 | 149 | 4,421 | 8.79 | 18,460 | 12.1 | 224,037 | 108.5 | 243,033 | 13.17 |
| 1869 | 461 | 8.4 | 3,870 | 121 | 4,692 | 10.16 | 19,181 | 13.6 | 260,147 | 76.5 | 199,025 | 10.38 |
| 1869 |  |  | 2,860 |  |  |  |  |  | 287,746 |  |  |  |
| 70 | 490 | 8.6 | 4,218 | 109 | 4,581 | 9.37 | 18,993 | 12.4 | 235,885 | 94.4 | 222,767 | 11.73 |
| 1871 | 422 | 6.0 | 2,530 | 128 | 3,231 | 7.68 | 19,944 | 11.6 | 230,722 | 114.5 | 264,076 | 13.24 |
| 1872 | 401 | 8.2 | 3,289 | 136 | 4,457 | 11.15 | 20,858 | 12.0 | 249,997 | 111.4 | 278,522 | 13.35 |
| 1873 | 451 | 6.2 | 2,795 | 143 | 3,989 | 8.87 | 22,172 | 12.7 | 281,255 | 106.9 | 300,670 | 13.56 |
| 1874 | 360 | 8.0 | 2,878 | 124 | 3,581 | 9.92 | 24,967 | 12.3 | 308,103 | 86.3 | 265,881 | 10.65 |
| 1875 | 407 | 7.5 | 3,050 | 108 | 3,297 | 8.10 | 26,3 | 11.1 | 292,136 | 89.5 | 261,397 | 9.91 |
| 1876 | 411 | 7.3 | 3,000 | 110 | 3,300 | 8.03 | 27,627 | 10.5 | 2S9,356 | 97.0 | 280,743 | 10.16 |
| 77 | 470 | 8.3 | 3,900 | 106 | 4,135 | 8.80 | 26,278 | 13.9 | 364,194 | 105.7 | 385,089 | 14.65 |
| 㭳 | 465 | 6.5 | 3,024 | 100 | 3,018 | 6.50 | 32,109 | 13.1 | 420,122 | 77.6 | 325,814 | 10.15 |
| 1879 | 647 | 7.0 | 4,529 | 128 | 5,797 | 8.96 | 35,430 | 14.1 | 496,435 | 1.10 .6 | 549,219 | 15.50 |
| 1879 | 647 | 5.3 | 3,397 |  |  |  | 35,430 | 13.0 | 459,483 |  |  |  |
| 1880 | 761 | 6.4 | 4,871 | 115 | 5,602 | 7.36 | 37,987 | 13.1 | 498,550 | 95.1 | 474,202 | 12.48 |
| 1881 | 662 | 6.9 | 4,579 | 149 | 6,823 | 10.28 | 37,709 | 10.2 | 383,280 | 119.2 | 456,880 | 12.12 |
| 1882 | 710 | 7.7 | 5,495 | 106 | 5,824 | 8.16 | 37,067 | 13.6 | 504,185 | 88.4 | 445,602 | 12.02 |
| 1883 | 717 | 5.9 | 4,231 | 117 | 4,950 | 6.90 | 36,456 | 11.6 | 421,086 | 91.1 | 383,649 | 10.52 |
| 1884 | 767 | 6.1 | 4,650 | 89 | 4,138 | 5.43 | 39,476 | 13.0 | 512,765 | 64.5 | 330,862 | 8.38 |
| 1885 | 683 | 4.1 | 2,790 | 100 | 2,790 | 4.10 | 34,189 | 10.4 | 3557,112 | 77.1 | 275,320 | 8.05 |
| 1886 | 697 | 4.6 | 3,209 | 100 | 3,209 | 4.60 | 30,806 | 12.4 | 457,218 | 68.7 | 314,226 | 8.54 |
| 188 | 717 | 7.1 | 5,094 | 88 | 4,483 | 6.25 | 37,542 | 12.1 | 456,329 | 68.1 | 310,613 | 8.25 |
| 1888 | 710 | 5.4 | 3,835 | 105 | 4,027 | 5.67 | 37,336 | 11.1 | 415,868 | 92.6 | 385,248 | 10.32 |
| 1889 | 666 | 6.2 | 4,129 | 90 | 3,716 | 5.58 | 33,580 | 12.9 | 434,383 | 69.5 | 301,869 | 8.99 |
| 1889 | 666 | 6.4 | 4,292 |  |  |  | 33,580 | 13.9 | 468,3\%4 |  |  |  |
| 90 | 700 | 4.4 | 3,0 | 100 | 3,080 | 4.40 | 34,048 | 11.1 | 378,097 | 83.3 | 315,112 | 9.25 |
| 1891 | 720 | 6.8 | 4,896 | 102 | 4,994 | 6.94 | 37,826 | 15.5 | 584,504 | 83.4 | 487,463 | 12.89 |
| 1892 | 740 | 7.1 | 5,254 | 89 | 4,676 | 6.32 | 39,552 | 13.3 | 527,956 | 62.2 | 328,329 | ${ }^{1} .30$ |
| 1893 | 760 | 8.2 | 6,232 | 72 | 4,487 | 5.90 | 37,934 | 11.3 | 427,553 | 53.5 | 228,599 | 6.03 |
| 94 | 760 | 5.0 | 3,800 | 65 | 2,470 | 3.25 |  | 13.1 | 516,485 | 48.9 | 252,709 | 6.41 |
| 1895 | 780 | 6.9 | 5,332 | 72 | 3,875 | 4.97 | 40,848 | 13.9 | 569,456 | 50.3 | 286,539 | 7.01 |
| 1896 | 770 | 7.3 | 5,621 | 83 | 4,665 | 6.06 | 43,916 | 12.4 | 544,193 | 71.7 | 390,346 | 8.89 |
| 1897 | 700 | 8.0 | 5,600 | 94 | 5,264 | 7.52 | 46,046 | 13.3 | 610,254 | 80.9 | 493,683 | 10.72 |
| 1898 | 760 | 9.2 | 6,992 | 78 | 5,454 | 7.18 | 51,007 | 15.1 | 772,163 | 58.2 | 449,022 | 8.80 |
| 1899 | 747 | 6.7 | 5,005 | 82 | 4,104 | 5.49 | 52,589 | 12.1 | 636,051 | 58.6 | 372,982 | 7.09 |
| 1899 | 747 | 5.8 | 4,342 |  |  |  | 52,589 | 12.5 | 658,534 |  |  |  |
| 190 | 830 | 9.6 | 7,968 | 82 | 6,534 | 7.87 | 51,387 | 11.7 | 602,708 | 62.0 | 373,578 | 7.27 |
| 1901 | 820 | 8.7 | 7,134 | 82 | 5,850 | 7.13 | 52,473 | 15.0 | 789,538 | 62.6 | 494,096 | 9.42 |
| 1902 | 640 | 5.3 | 3,392 | 92 | 3,121 | 4.88 | 49,649 | 14.6 | 724,528 | 63.0 | 456,530 | 9.20 |
| 1903 | 650 | 5.1 | 3,468 | 97 | 3,364 | 4.95 | 51,632 | 12.9 | 664,543 | 69.5 | 461,605 | 8.94 |
| 1904 | 600 | 8.6 | 5,160 | 119 | 6,140 | 10.23 | 47,825 | 12. | 50, 375 | , | 551,128 | 11.52 |
| 1905 | 600 | 6.7 | 4,020 | 102 | 4,100 | 6.33 | 49,389 | 14.7 | 726,384 | 74.6 | 542,119 | 10.98 |
| 1906 | 560 | 9.1 | 5,096 | 93 | 4,739 | 8.46 | 47,800 | 15.8 | 757,195 | 66.2 | 501,355 | 10.49 |
| 1907 | 520 | 9.5 | 4,940 | 107 | 5,286 | 10.16 | 45,113 | 14.1 | 637,981 | 86.5 | 552,074 | 12.24 |
| 1908 | 500 | 10.0 | 5,000 | 107 | 5,350 | 10.70 | 45,970 | 14.0 | 644,656 | 92.2 | 594,092 | 12.92 |
| 1909 | 502 | 9.5 | 4,769 | 127 | 6,057 | 12.06 | 4 4,262 | 15.8 | 700,434 | 98.4 | 689,108 | 15.57 |
| 1909 | 502 | 7.6 | 3,827 |  |  |  | 4, 262 | 15.4 | 683,379 |  |  |  |
| 1910 | 598 | 11.4 | 6,817 | 110 | 7,499 | 12.54 | 45,681 | 13.9 | 635,121 | 88.3 | 561,051 | 12.28 |
| 1911 | 626 | 10.6 | 6,636 | 102 | 6,769 | 10.81 | 49,543 | 12.5 | 621,338 | 87.4 | 543,063 | 10.96 |
| 1912 | 598 | 8.9 | 5,322 | 111 | 5,007 | 9.88 | 45,814 | 15.9 | 730,267 | 76.0 | 555,280 | 12.12 |
| 1913-- | 602 | 11.7 | 7,078 | 106 | 7,503 | 12.40 | 50,184 | 15.2 | 763,380 | 79.9 | 610,122 | 12.16 |
| 1914 | 611 | 12.0 | 7,332 | 117 | 8,578 | 14.04 | 53,541 | 16.6 | 891,017 | 98.6 | 878,680 | 16.41 |
| $\begin{aligned} & 1915 \\ & 1916 \end{aligned}$ | 900 870 | 10.9 10.5 | 9,810 | 120 | 11,772 | 13.08 | 60,469 | 17.0 | 1,025,801 | 91.9 | 942,303 | 15.58 |
| 1916 | 870 | 10.5 | ${ }^{9,135}$ | 176 | 16,078 | 18.48 | 52,316 | 12.2 | 636,318 | 160.3 | 1,019,968 | 19.50 |
| 1918 | 90 | 7.0 | 6,300 | 234 230 | 14,490 | 23.40 |  | 14.1 | 636,655 | 200.8 | 1,278,1 | 28.35 |
| 1919*- | 705 | 7.9 | 5,570 | 233 | 12,978 | 18.41 | 75,694 | 12.6 | 921,438 967,979 | 204.2 | 1,881,826 | 31.80 |
| - | 621 | 7.6 | 4,745 |  | 12, |  | 75,099 | 12.8 | 967,979 945,403 | 214.9 | 2,080,056 | 27.48 |
| 1920 | 680 | 11.7 | 7,956 | 210 | 16,708 | 24.57 | 61,143 | 13.6 | 833,027 | 143.7 | 1,197,263 | 19.58 |
| 1921--- | 600 | 7.5 | 4,500 | 144 | 6,480 | 10.80 | 63,696 | 12.8 | 814,905 | 92.6 | 1,754,834 | 11.85 |
| 1922**- | 612 | 9.0 | 5,508 | 136 | 7,491 | 12.24 | 61,230 | 14.0 | 856,211 | 100.9 | 864,139 | 14.11 |

* Revisions based on 1919 census.
** Subject to revision Decernber, 1923.


CHART 17.-WHEAT: YIELD PER ACRE, N. C. AND U. S.


CHART 18.-WHEAT: FARM PRICE, N. C. AND U. S.


CHART 19.-WHEAT: VALUE PER ACRE, N. C. AND U. S.
shows the percentage increase in North Carolina to be 37.3 and in the United States 20.6. Of course in both the United States and North Carolina there has been a decline in yield since the high-pressure days of the war years, but in North Carolina the trend is again upwards, though there would seem to be a continuous decline for the country as a whole.

In farm price per bushel of wheat (chart 18) we run rather uniformly parallel with the United States except that in the war years the United States price gained on ours and since the war we seem to have had the advantage. Our price is uniformly higher than the United States price, but on the whole the United States has made a slightly greater gain in average price. The percentage gain of the latest decade, 1913-22, over the earliest, 1866-75, was 25.6 in North Carolina and 27.8 in the United States.

There is not sufficient difference between price per bushel of wheat in North Carolina and in the United States to overcome the difference in yield per acre; consequently our value per acre (chart 19) is uniformly lower than the value per acre in the United States. We gained decidedly on the United States average up to 1916, but have failed to keep pace with the United States since that date. The percentage gain for the decade 1913-22 over the decade 1866-75 was 71.4 in North Carolina and 53.9 in the United States.

Oats. Our oats crop is so insignificant as hardly to call for detailed consideration. It represents three-tenths of one percent of the total oats crop of the United States, and contributes eight. tenths of one percent to our state aggregate crop values. As with corn and wheat, the yield per acre (chart 20) in the United States as a whole is greatly larger than in North Carolina, but we show a greater percentage gain than the United States shows when the averages for the earliest and latest decades considered are compared ( 35.9 percent gain in North Carolina and 11.7 percent in the United States at large). As with corn, our higher farm price (chart 21) has brought up our value per acre (chart 22) nearer to the United States level. The gain in value per acre in the average for the decade 1913-22 over the average for 1866-75 was 101.2 percent in North Carolina and 49.6 percent in the United States.

TABLE IV—OATS

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { © } \\ & \text { © } \end{aligned}$ | 06 7 0 0 0 0 4 0 0 0 0 0 0 4 4 |  |  |  |  |  |  |  |  |  |  |  |
| 1866 | 20 | 14 | 2,9 | 49 | 1,4 | 7.01 | 8,864 | 30.2 | 268,141 | 35.1 |  | 0.61 |
| 1867 | 262 | 13.3 | 3,479 | 46 | 1,595 | 6.12 | 10,082 | 27.6 | 275,698 | 44.5 | 123,903 | 析 |
| 1868 | 268 | 13.0 | 3,479 | 48 | 1,683 | 6.24 | 9,666 | 26.4 | 254,961 | 41.7 | 106,356 | 11.00 |
| 1869 | 232 | 15.1 | 3,500 | 52 | 1,S03 | 7.85 | 9,461 | 30.5 | 285,331 | 38.0 | 109,522 | 11.58 |
| 1869 |  |  | 3,220 |  |  |  |  |  | 282,107 |  | 10, 02 |  |
| 1870 | 170 | 16.2 | 2,750 | 51 | 1,407 | 8.26 | 8,792 | 28.1 | 247,277 | 39.0 | 96,444 | 10.97 |
| 1871 | 208 | 10.6 | 2,200 | 57 | 1,246 | 6.04 | ,366 | 30.6 | 255,743 | 36.2 | 92,591 | 11.07 |
| 1872 | 207 | 13.8 | 2,860 | 71 | 2,027 | 9.80 | 9,001 | 30.2 | 271,747 | 29.9 | 81,304 | 9.03 |
| 1873 | 193 | 16.3 | 3,146 | 52 | 1,622 | 8.48 | 9,752 | 27.7 | 270,340 | 34.6 | 93,474 | 9.59 |
| 1874 | 239 | 12.9 | 3,083 | 60 | 1,835 | 7.74 | 10,897 | 22.1 | 240,369 | 47.1 | 113,134 | 10.38 |
| 1875 | 250 | 13.0 | 3,250 | 51 | 1,643 | 6.63 | 11,915 | 29.7 | 354,318 | 32.0 | 113,441 | 9.52 |
| 1876 | 261 | 13.5 | 3,530 | 49 | 1,747 | 6.62 | 13,359 | 24.0 | 320,884 | 32.4 | 103,845 | 7.77 |
| 1877 | 257 | 15.5 | 3,980 | 45 | 1,781 | 6.98 | 12,826 | 31.7 | 406,394 | 28.4 | 115,546 | 9.01 |
| 18 | 278 | 16.0 | 4,448 | 43 | 1,909 | 6.59 | 12,176 | 31.4 | 413,579 | 24.6 | 101,752 | 7.72 |
| 1879 | 500 | 16.0 | 8,000 | 45 | 3,600 | 7.20 | 16,145 | 27.9 | 450,745 | 33.3 | 150,178 | 9.30 |
| 1879 | 500 | 7.7 |  |  |  |  | 16,145 | 25.3 | 407,859 |  | 150,178 |  |
| 1880 | 501 | 11.0 | 5,515 | 51 |  |  | 16,188 | 25.8 | 417,885 | 36.0 | 150,244 | 9.28 |
| 1881 | 506 | 8.1 | 4,081 | 62 | 2,530 | 5.02 | 16,832 | 24.7 | 416,481 | 46.4 | 193,199 | 11.48 |
| 1882 | 582 | 9.8 | 5,713 | 48 | 2,742 | 4.70 | 18,495 | 26.4 | 488,251 | 37.5 | 182,978 | 9.89 |
| 1883 | 594 | 8.7 | 5,142 | 51 | 2,622 | 4.44 | 20,325 | 28.1 | 571,302 | 32.7 | 187,040 | 9.20 |
| 1884 | 618 | 7.5 | 4,622 | 46 | 2,126 | 3.45 | 21,301 | 27.4 | 583,628 | 27.7 | 161,528 | 7.58 |
| 1885 | 599 | 7.5 | 4,483 | 50 | 2,242 | 3.75 | 2,784 | 27.6 | 629,409 | 28.5 | 179,632 | 7.88 |
| 1886 | 635 | 9.9 | 6,276 | 45 | 2,824 | 4.46 | 23,65S | 26.4 | 624,134 | 29.8 | 186,138 | 7.86 |
| 1887 | 654 | 13.0 | 8,504 | 44 | 3,742 | 5.72 | 25,921 | 25.4 | 659,618 | 30.4 | 200,700 | 7.74 |
| 1888 | 661 | 9.2 | 6,078 | 46 | 2,796 | 4.23 | 26,998 | 26.0 | 701,735 | 27.8 | 195,424 | 7.24 |
| 1859 | 542 | 10.2 | 5,52S | 44 | 2,432 | 4.49 | 2S,321 | 28.3 | 801,586 | 21.9 | 175,801 | 6.21 |
| 1889 | 542 | 8.3 | 4,513 |  |  |  | 28,321 | 28.6 | 809,251 |  |  |  |
| 1890 | 540 | 9.2 | 4,068 | 51 | 2,534 | 4.69 | 28,102 | 20.4 | 572,665 | 41.6 | 238,345 | 8.48 |
| 1891 | 425 | 9.5 | 4,03s | 51 | 2,059 | 4.84 | 27,604 | 30.4 | 835,876 | 30.6 | 256,814 | 9.30 |
| 1892 | 400 | 9.7 | 3,580 | 45 | 1,746 | 4.36 | 28,023 | 24.8 | 695,267 | 31.5 | 218,954 | 7.81 |
| 1893 | 400 | 14.1 | 5,640 | 44 | 2,482 | 6.20 | 2S,452 | 23.8 | 676,154 | 29.1 | 196,505 | 6.90 |
| 1894 | 390 | 10.9 | 4,251 | 44 | 1,870 | 4.80 | 23,362 | 25.2 | 715,559 | 32.1 | 229,538 | 8.09 |
| 1895 | 370 | 15.1 | 5,58 | 38 | 2,123 | 5.74 | 29,379 | 30.2 | 885,900 | 19.4 | 172,186 | 5.86 |
| 1896 | 340 | 12.0 | 4,080 | 35 | 1,428 | 4.20 | 29,645 | 26.3 | 780,563 | 18.3 | 143,192 | 4.93 |
| 189 | 310 | 13.0 | 4,030 | 37 | 1,491 | 4.81 | 28,353 | 27.9 | 791,591 | 20.3 | 164,886 | 5.82 |
| 18 | 300 | 14.3 | 4,290 | 37 | 1,587 | 5.29 | 28,769 | 29.3 | 842,747 | 25.2 | 212,482 | 7.39 |
| 1899 | 271 | 12.0 | 3,252 | 41 | 1,333 | 4.92 | 29,540 | 31.3 | 925,555 | 24.5 | 226,58S | 7.67 |
| 1899 | 271 | 9.1 | 2,455 |  |  |  | 29,510 | 31.9 | 943,389 |  |  |  |
| 00 | 260 | 13.9 | 3,614 | 45 | 1,636 | 6.26 | 30,290 | 29.9 | 904,566 | 25.4 | 230,160 | 7.60 |
| 1901 | 260 | 14.4 | 3,744 | 51 | 1,909 | 7.34 | 29,894 | 26.0 | 778,531 | 40.0 | 311,374 | 10.42 |
| 1902 | 250 | 12.7 | 3,175 | 51 | 1,619 | 6.48 | 30,578 | 34.5 | 1,055,441 | 30.6 | 322,944 | 10.54 |
| 190 | 240 | 11.4 | 2,736 | 52 | 1,423 | 5.93 | 30,866 | 27.5 | 848,824 | 33.8 | 286,879 | 9.29 |
| 04 | 225 | 15.8 | 3,555 | 52 | 1,849 | 8.22 | 31,353 | 32.1 | 1,007,183 | 31.0 | 312,467 | 9.97 |
| 05 | 230 | 15.3 | 3,519 | 47 | 1,654 | 7.19 | 32,072 | 33.3 | 1,068,780 | 28.8 | 308,086 | 9.61 |
| 1905 | 225 | 16.2 | 3,645 | 49 | 1,786 | 7.94 | 33,353 | 31.0 | 1,034,623 | 31.8 | 329,142 | 9.87 |
| 1907 | 220 | 15.6 | 5,632 | 60 | 3,379 | 9.36 | 33,641 | 24.0 | 807,308 | 44.3 | 357,340 | 10.62 |
| 1908 | 230 | 16.5 | 3,795 | 63 | 2,391 | 10.40 | 34,006 | 24.9 | 847,109 | 47.3 | 400,363 | 11.77 |
| 1909 | 228 | 16.5 | 3,762 | 66 | 2,483 | 10.89 | 35,159 | 30.4 | 1,068,289 | 40.6 | 433,869 | 12.34 |
| 1909 | 228 | 12.2 | 2,783 |  |  |  | 35,159 | 28.6 | 1,007,143 |  |  |  |
| 1910 | 221 | 18.2 | 4,022 | 60 | 2,413 | 10.92 | 37,548 | 31.6 | 1,186,341 | 34.4 | 408,388 | 10.88 |
| 1911 | 219 | 16.5 | 3,614 | 63 | 2,277 | 10.40 | 37,763 | 24.4 | 922,293 | 45.6 | 414,663 | 10.88 |
| 1912 | 204 | 18.6 | 3,794 | 62 | 2,352 | 11.53 | 37,917 | 37.4 | 1,418,337 | 31.9 | 452,469 | 11.9? |
| 1913 | 230 | 19.5 | 4,485 | 61 | 2,736 | 11.90 | 35,399 | 29.2 | 1,121,768 | 39.2 | 439,596 | 11.45 |
| 191 | 25 | 17.5 | 4,375 | 65 | 2,844 | 11.38 | 38,442 | 29.7 | 1,141,060 | 43.8 | 499,431 | 12.99 |
| 1915 | 350 | 23.0 | 8,050 | 62 | 4,991 | 14.26 | 40,996 | 37.8 | 1,549,030 | 36.1 | 559,506 | 13.65 |
| 1916 | 390 | 17.5 | 6,825 | 74 | 5,050 | 12.95 | 41,527 | 30.1 | 1,251,837 | 52.4 | 655,928 | 15.80 |
| 1917 | 275 | 16.0 | 4,400 | 93 | 4,092 | 14.85 | 43,553 | 36.6 | 1,592,740 | 66.6 | 1,061,474 | 24.37 |
| 1918 | 300 | 17.0 | 5,100 | 108 | 5,508 | 18.36 | 44,349 | 34.7 | 1,538,124 | 70.9 | 1,090,322 | 24.59 |
| 1919* | 170 | 16.7 | 2,839 | 106 | 3,009 | 17.70 | 40,359 | 29.3 | 1,184,030 | 70.4 | 833,922 | 20.66 |
| 1919 | 126 | 13.3 | 1,671 |  |  |  | 37,991 | 27.8 | 1,055,183 |  |  |  |
| 1920 | 154 | 22.0 | 3,388 | 96 | 3,252 | 21.12 | 42,491 | 35.2 | 1,496,2S1 | 46.0 | 688,311 | 16.20 |
| 1921 | 170 | 18.0 | 3,060 | 70 | 2,142 | 12.60 | 45,495 | 23.7 | 1,078,341 | 30.2 | 325,954 | 7.16 |
| 1922** | 178 | 21.0 | 3,738 | 67 | 2,504 | 14.07 | 40,693 | 29.9 | 1,215,496 | 39.4 | 478,548 | 11.76 |

[^1]

CHART 20.-OATS: YIELD PER ACRE, N. C. AND U. S.


CHART 21.-OATS: FARM PRICE, N. C. AND U. S.


CHART 22.-OATS: VALUE PER ACRE, N. C. AND U. S.
Potatoes. Irish potatoes are another crop of which our contribution to the food supply of the country is unimportant. We produced 1.2 percent of the total United States crop in the fiveyear period 1917-21, and the average value of our crop in this period represented 1.5 percent of our average aggregate crop values. As already noted, Irish potatoes are a crop in which our present yields (chart 23) in the main are not up to their earlier levels. The trend was sharply downward in both the United States and North Carolina in the decade from 1880 to 1890, after which time the trend has been on the whole steadily upward. Between the earlier and later decades considered (1866-75 and 1913-22), our decline in average yields has been 1.4 percent, whereas in this period the United States has advanced in yields 4.6 percent. Irish potatoes are a crop in which there is a wide variation in yield from year to year and correspondingly large variations in price in opposite directions from the variations in yield. In the main, however, we have paralleled the United States prices and values per acre rather closely (charts 24 and 25), on a higher level in both instances, and there has been a

TABLE V-POTATOES, IRISH

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Hz} \\ & \stackrel{\sim}{\infty} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { H } \\ & 00 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { B } \\ & \text { 芯 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & H \end{aligned}$ |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { H } \\ & \text { 40 } \\ & 04 \\ & 00 \\ & 08 \\ & 40 \end{aligned}$ |  |  |  |  |  |
| 1866 | 10 | 81 | 831 | 49 | 409 | 39.69 | 1,069 | 100.2 | 107,201 | 47.3 | 50,723 | 47.43 |
| 1867 | 9 | 93 | 838 | 44 | 372 | 40.92 | 1,192 | 82.0 | 97,783 | 65.9 | 64,462 | 54.07 |
| 1865 | 11 | 76 | 838 | 66 | 555 | 50.16 | 1,132 | 93.8 | 106,090 | 59.3 | 62,919 | 55.60 |
| 1869 | 9 | 74 | 675 | 63 | 428 | 46.62 | 1,222 | 109.5 | 133,886 | 42.9 | 57,481 | 47.03 |
| 1869 |  |  | 739 |  |  |  |  |  | 143,337 |  |  |  |
| 18 | 9 | 81 | 742 | 63 | 466 | 51.03 | 1,325 | 86.6 | 114,775 | 65.0 | 74,621 | 56.31 |
| 1871 | 8 | 105 | 816 | 64 | 521 | 67.20 | 1,221 | 98.7 | 120,462 | 53.9 | 164,905 | 53.16 |
| 1872 | 8 | 103 | 818 | 62 | 526 | 63.86 | 1,331 | 85.3 | 113,516 | 53.5 | 60,692 | 45.59 |
| 1873 | 8 | 94 | 780 | 64 | 496 | 60.16 | 1,295 | 81.9 | 106,089 | 65.2 | 69,154 | 53.39 |
| 1874 | 9 | 75 | 702 | 62 | 437 | 46.50 | 1,310 | 80.9 | 105,981 | 61.5 | 65,223 | 49.79 |
| 18 | 9 | 85 | 745 | 58 | 435 | 49.30 | 1,510 | 110.5 | 166,877 | 34.4 | 57,358 | 37.98 |
| 1876 | 12 | 70 | 850 | 59 | 499 | 41.30 | 1,742 | 71.7 | 124,827 | 61.9 | 77,320 | 44.39 |
| 1877 | 12 | 72 | 853 | 76 | 647 | 54.72 | 1,792 | 94.9 | 170,092 | 43.7 | 74,272 | 41.44 |
| 18 | 12 | 99 | 1,197 | 59 | 705 | 58.41 | 1,777 | 69.9 | 124,127 | 58.7 | 72,924 | 41.04 |
| 1879 | 12 | 92 | 1,104 | 63 | 696 | 57.96 | 1,837 | 98.9 | 181,626 | 43.6 | 79,154 | 43.09 |
| 1879 |  |  | 72.3 |  |  |  |  |  | 169,459 |  |  |  |
| 1880 | 12 | 105 | 1,273 | 67 | 853 | 70.35 | 1,843 | 91.0 | 167,660 | 48.3 | 81,062 | 44.00 |
| 1881 | 19 | 38 | 710 | 70 | 497 | 26.60 | 2,042 | 53.5 | 109,145 | 91.0 | 99,291 | 48.63 |
| 1882 | 20 | 55 | 1,100 | 75 | 825 | 41.70 | 2,172 | 78.7 | 170,973 | 55.7 | 95,305 | 43.89 |
| 1883 | 20 | 65 | 1,313 | 68 | 893 | 44.20 | 2,289 | 90.9 | 208,164 | 42.2 | 87,849 | 38.37 |
| 18 | 20 | 63 | 1,260 | 55 | 693 | 34.65 | 2,221 | 85.8 | 190,642 | 39.6 | 75,524 | 34.00 |
| 188 | 21 | 61 | 1,256 | 57 | 716 | 34.77 | 2,266 | 77.2 | 175,029 | 44.7 | 78,153 | 34.49 |
| 1886 | 21 | 60 | 1,273 | 56 | 713 | 33.60 | 2,287 | 73.5 | 168,051 | 46.7 | 78,442 | 34.30 |
| 1887 | 21 | 52 | 1,114 | 59 | 657 | 30.68 | 2,357 | 56.9 | 134,103 | 68.2 | 91,507 | 38.82 |
| 1888 | 22 | 63 | 1,377 | 65 | 895 | 40.95 | 2,533 | 79.9 | 202,365 | 40.2 | 81,414 | 32.14 |
| 1889 | 18 | 73 | 1,314 | 52 | 683 | 37.96 | 2,601 | 77.4 | 201,200 | 35.4 | 71,294 | 27.41 |
| 1889 | 18 | 51 | 1,199 |  |  |  | 2,601 |  | 217,546 |  |  |  |
| 1890 | 18 | 73 | 1,314 | 65 | 854 | 47.45 | 2,653 | 56.7 | 150,494 | 75.3 | 113,291 | 42.70 |
| 1891 | 16 | 75 | 1,200 | 68 | 816 | 51.00 | 2,732 | 93.7 | 256,122 | 35.6 | 91,229 | 33.39 |
| 1892 | 19 | 55 | 1,045 | 61 | 637 | 33.55 | 2,650 | 62.1 | 164,516 | 65.5 | 107,835 | 40.69 |
| 1893 | 20 | 97 | 1,940 | 60 | 1,164 | 58.20 | 2,722 | 71.7 | 195,040 | 58.4 | 113,886 | 41.84 |
| 1894 | 22 | 62 | 1,364 | 60 | 818 | 37.20 | 2,891 | 63.6 | 183,841 | 52.8 | 97,030 | 33.56 |
| 1895 | 22 | 79 | 1,738 | 55 | 956 | 43.45 | 3,101 | 102.3 | 317,114 | 26.2 | 83,151 | 26.81 |
| 1896 | 24 | 79 | 1,896 | 43 | 815 | 33.97 | 2,975 | 91.4 | 271,769 | 29.0 | 78,783 | 26.48 |
| 1897 | 24 | 66 | 1,584 | 64 | 1,014 | 42.24 | 2,813 | 67.9 | 191,025 | 54.2 | 103,442 | 36.77 |
| 1898 | 24 | 67 | 1,608 | 62 | - 997 | 41.54 | 2,841 | 77.0 | 218,772 | 41.5 | 90,897 | 31.99 |
| 1899 | 24 | 57 | 1,368 | 66 | 903 | 37.62 | 2,939 | 88.6 | 260,257 | 39.7 | 103,365 | 35.17 |
| 1899 | 24 | 69 | 1,636 |  |  |  | 2,939 | 93.0 | 273,318 |  |  |  |
| 1900 | 26 | 61 | 1,586 | 65 | 1,031 | 39.65 | 2,987 | 82.9 | 247,759 | 42.3 | 104,764 | 35.07 |
| 1901 | 26 | 64 | 1,664 | 72 | 1,198 | 46.08 | 2,996 | 66.3 | -198,626 | 76.3 | 151,602 | 50.60 |
| 1902 | 26 | 64 | 1,664 | 67 | 1,115 | 42.88 | 3,078 | 95.5 | 293,918 | 46.9 | 137,730 | 44.75 |
| 1903 | 28 | 67 | 1,876 | 74 | 1,388 | 49.58 | 3,080 | 85.1 | 262,053 | 60.9 | 159,620 | 51.82 |
| 190 | 30 | 78 | 2,340 | 70 | 1,638 | 54.60 | 3,172 | 111.1 | 352,268 | 44.8 | 157,646 | 49.70 |
| 1905 | 30 | 77 | 2,310 | 68 | 1,571 | 52.36 | 3,195 | 87.3 | 278,885 | 61.1 | 170,340 | 53.31 |
| 1906 | 32 | 75 | 2,400 | 74 | 1,776 | 55.50 | 3,244 | 102.2 | 331,685 | 50.6 | 167,795 | 51.72 |
| 1907 | 32 | 88 | 2,816 | 78 | 2,196 | 68.64 | 3,375 | 95.7 | 322,954 | 61.3 | 197,863 | 58.63 |
| 1508 | 32 | 79 | 2,528 | 77 | 1,947 | 60.83 | 3,503 | 86.2 | 302,000 | 69.7 | 210,618 | 60.13 |
| 1909 | 32 | 74 | 2,36S | 81 | 1,918 | 59.94 | 3,669 | 107.5 | 394,553 | 54.2 | 213,679 | 58.24 |
| 1909 | 32 | 74 | 2,372 |  |  |  | 3,669 | 106.1 | 389,195 |  |  |  |
| 1910 | 33 | 89 | 2,937 | 73 | 2,144 | 64.97 | 3,720 | 93.8 | 349,032 | 55.7 | 194,566 | 52.30 |
| 1911 | 31 | 48 | 1,488 | 108 | 1,607 | 51.84 | 3,619 | 80.9 | 292,737 | 79.9 | 233,778 | 64.60 |
| 1912 | 30 | 85 | 2,550 | 76 | 1,938 | 64.60 | 3,711 | 113.4 | 420,647 | 50.5 | 212,550 | 57.28 |
| 1913 | 30 | 80 | 2,400 | 82 | 1,968 | 65.60 | 3,668 | 90.4 | 331,525 | 68.7 | 227,903 | 62.13 |
| 1914.-- | 33 | 52 | 1,716 | 92 | 1,579 | 47.84 | 3,711 | 110.5 | 409,921 | 48.7 | 199,460 | 53.75 |
| 1915 | 35 | 90 | 3,150 | 73 | 2,300 | 65.70 | 3,734 | 96.3 | 359,721 | 61.7 | 221,932 | 59.45 |
| 1916 | 40 | 95 | 3,800 | 140 | 5,320 | 133.00 | 3,565 | 80.5 | 286,953 | 146.1 | 419,333 | 117.62 |
| 1917 | 50 | 00 | 4,500 | 143 | 6,435 | 128.70 | 4,384 | 100.8 | 442,108 | 122.8 | 542,77t | 123.81 |
| 1918. | 65 | 95 | 6,175 | 135 | 8,336 | 128.25 | 4.295 | 95.9 | 411,860 | 119.3 | 491,527 | 114.44 |
| 1919*- | 47 | 80 | 3,760 | 163 | 6,129 | 130.40 | 3,542 | 91.2 | 322,867 | 159.5 | 514,855 | 145.36 |
| 1919 --- | 36 | 80 | 2,854 |  |  |  | 3,252 | 89.3 | 290,428 |  | 514,85 |  |
| 1920 | 46 | 91 | 4,186 | 142 | 5,944 | 729.22 | 3,657 | 110.3 | 403,296 | 114.5 | 461,778 | 126.27 |
| 1921--- | 46 | - 88 | 4,048 | 143 | 5,789 | $\underline{25.84}$ | 3,941 | 191.8 | 361,659 | 110.1 | 398,362 | 101.08 |
| 1922** | 48 | 94 | 4,512 | 101 | 4,557 | 94.94 | 4,331 | 104.2 | 451,185 | 58.2 | 262,608 | 60.63 |

[^2]** Subject to revision December, 1923.


CHART 23.-IRISH POTATOES: YIELD PER ACRE, N. C. AND U. S.


CHART 24.-IRISH POTATOES: FARM PRICE, N. C. AND U. S.


CHART 25.-IRISH POTATOES: VALUE PER ACRE, N. C. AND U. S.
large percentage advance in both the state and the United States in the price and in the value per acre of this crop. Comparing the two decades 1866-75 and 1913-22, we find for North Carolina a gain in farm price per bushel of 104.0 percent and for the United States a gain of 83.9 percent; while in value per acre the gain for North Carolina was 103.6 percent and for the United States 93.0 percent.

Sweet potatoes. In this crop we take our place among the five leading states, producing 10.4 percent of the total United States crop average for 1917-21; but this production represents only 2.7 percent of our aggregate crop values for the same years. Our average yield per acre (chart 26) has been uniformly above the United States average, and, comparing the decades 1865-75 and 1913-22, we have gained 7.7 percent in yield per acre while the United States has gained 4.6 percent. In farm price per bushel (chart 27), while our average has been lower than the United States average, we have gained in the period considered 57.0 percent while the United States has gained only 20.4 percent. The result is that in recent years our value per acre (chart 28) has risen above the United States average. Our gain in value per acre in the period considered has been 72.1 percent, while the gain for the United States as a whole has been 26.3 percent.

TABLE VI-SWEET POTATOES

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { H్ర } \\ & \text { ®ut } \end{aligned}$ |  |  |  |  |  |  | 0 0 0 0 0 0 0 0 0 0 0 0 0 4 0 |  | $\begin{aligned} & \text { 号 } \\ & \text { y } \\ & \text { \#n } \\ & 0 \\ & 0.0 \\ & 0 \end{aligned}$ |  |  |  |
| $\begin{aligned} & 1868 \\ & 1869 \end{aligned}$ |  | $83$ |  | ${ }_{7}^{66}$ | ----- | $\begin{aligned} & 54.78 \\ & 53.96 \end{aligned}$ |  | $\begin{array}{r} 102.2 \\ 78.7 \end{array}$ | ------- | $\begin{aligned} & 79.0 \\ & 92.8 \end{aligned}$ |  | $80.74$ |
| 1870 |  | 108 |  | 60 |  | 4.80 |  | 107.4 |  | 82.1 |  |  |
| 1871 |  | 101 |  | 62 |  | 62.62 |  | 99.0 |  | 78.4 |  |  |
| 1872 |  | 115 |  | 49 |  | 56.35 |  | 83.5 |  | 79.7 |  | 66.55 |
| 1873 |  | 98 |  | 55 |  | 53.99 |  | 37.2 |  | 76.9 |  | 74.75 |
| 1874 |  | 95 |  | 55 |  | 52.25 |  | 82.4 |  | 76.1 |  | 62.71 |
| 1875 |  | 90 |  | 52 |  | 46.50 |  | 89.0 |  | 67.2 |  | 59.81 |
| 1876 |  |  |  |  |  |  |  |  |  |  |  |  |
| 187 |  | 112 |  |  |  |  |  | Os. |  |  |  |  |
| 1870 |  | 112 |  | 49 |  | 46.0 |  | 90.4 |  | 56 |  | 51.17 |
| 1880 |  | 100 |  | 45 |  | 45.03 |  | 101.8 |  | 51.5 |  | 52.43 |
| 1881 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1882 |  | 95 |  | 45 |  | 42.75 |  | 96.2 |  | 60 |  | 58.20 |
| 1883--- |  | 88 |  | 46 |  | 40.48 |  | 18.0 |  | 57.1 |  | 44.54 |
| 1884 |  | 78 |  | 46 |  | 35.88 |  | 78.8 |  | 57.0 |  | 45.31 |
| 1885 |  | 96 |  | 41 |  | . 36 |  | 96.4 |  | 50.3 |  | 48.49 |
| 1886 |  | 96 |  | 41 |  | 9.36 |  | 87.5 |  | 51.5 |  | 45.06 |
| 15 |  |  |  | 43 |  |  |  | 80.8 |  | 57.6 |  | 4.51 |
| 1858 |  | 95 |  | 43 |  | 40.85 |  | 97.2 |  | 47.9 |  |  |
| 1889 |  | 95 |  | 43 |  | 40.85 |  | 87.2 |  | 53.2 |  | 46.3 |
| 1890 |  | 114 |  | 40 |  | . 60 |  | 99.3 |  | . 8 |  | 12 |
| 1891 |  | 101 |  | 44 |  | 44.44 |  | 88.5 |  | 0.1 |  | 44.34 |
| 1892--- |  | 95 |  |  |  |  |  | . 0 |  |  |  |  |
| 1893 |  | 104 |  |  |  |  |  | 87.2 |  |  |  |  |
| 1894--- |  | 100 |  | 37 |  | 37.00 |  | 92.4 |  | 45.5 |  | 42.04 |
| 1895 |  | 89 |  | 54 |  | 48.06 |  | 79.1 |  | 49.0 |  | 38.76 |
| 1896--- |  | 80 |  | 32 |  | 25.60 |  | 70.8 |  | 44.3 |  | 31.36 |
| 1897--- |  | 80 |  | 34 |  | 27.20 |  | 72.0 | ------- | 50.0 | ---- | 36.00 |
|  | 69 | 8 |  | 40 |  | 34.40 |  | 72.1 | 42,5 | 52.9 |  | 41.11 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1900 | 69 | 88 | 6,072 | 42 | 2,550 | 36.96 | 544 | 88.9 | 48,346 | 50.6 | 4,478 | 45.09 |
| 1901 | 71 | 87 | 6,177 | 46 | 2,841 | 40.02 | 547 | 81.7 | 44,697 | 57.5 | 25,720 | 47.02 |
| 1902 | 70 | 88 | 6,160 | 46 | 2,834 | 40.48 | 532 | 85.2 | 45,344 | 58.1 | 26,358 | 49.55 |
| 1903 | 72 | 97 | 6,981 | 45 | 3,143 | 43.65 | 548 | 89.2 | 48,870 | 58.3 | 28,478 | 51.97 |
| 1904 | 73 | 100 | 7,300 | 50 | 3,650 | 50.00 | 548 | 88.9 | 48,705 | 60.4 | 29,424 | 53.69 |
| 1905 | 73 | 95 | 6,935 |  | 3,259 | 44.65 | 551 | 92.6 |  | 58.3 |  | 53.95 |
| 1906 | 75 | 87 | 6,525 | 50 | 3,262 | 43.50 | 551 | 90.2 | 49,948 | 62.2 | 31,053 | 56.07 |
| 1907 | 78 | 90 | 7,020 | 60 | 4,212 | 54.00 | 565 | 88.2 | 49,813 | 70.0 | 34,858 | 61.70 |
| 1908 | S0 | 93 | 7,440 | 53 | 3,943 | 49.29 | 599 | 92.4 | 55,352 | 66.1 | 36,56ı | 61.04 |
| 1909 | 85 | 100 | 8,493 | 57 | 4,841 | 56.43 | 641 | 92.4 | 59,232 | 69.4 | 41,052 | 61.76 |
| 1910 | 84 | 105 | 8,820 | 55 | 4,851 | 57.75 | 641 | 93.5 | 59,938 | 67.1 | 40,216 | 62.74 |
| 1911 | 77 | 86 | 6,622 | 63 | 4,172 | 54.18 | 605 | 90.1 | 54,538 | 75.5 | 41,202 | 68.10 |
| 1912 | 75 | 90 | 6,750 | 62 | 4,155 | 55.80 | 583 | 95.2 | 55,479 | 72.6 | 40,264 | 69.06 |
| 1913 | 80 | 100 | 8,000 | 61 | 4,880 | 61.00 | 625 | 94.5 | 59,057 | 72.6 | 42,884 | 68.61 |
| 1914 | 76 | 90 | 6,840 | 65 | 4,446 | 58.50 | 603 | 93.8 | 56,574 | 73.0 | 41,294 | 68.48 |
| 1915 | 85 | 105 | 5,925 | 56 | 4,998 | 58.80 | 731 | 103.5 | 75,639 | 62.1 | 46,980 | 61.27 |
| 1916 | 87 | 107 | 9,309 | 75 | 6,982 | 80.25 | 774 |  | 70,955 | 81.8 | 60,141 | 77.70 |
| 1917 | 90 | 95 | 8,550 | 105 | 8,978 | 99.75 | 919 | 91.2 | 83,822 | 110.8 | 92,916 | 101.11 |
| 1918 | 95 | 110 | 10,450 | 132 | 13,794 | 145.20 | 940 | 93.5 | 87,924 | 135.2 | 118,863 | 126.45 |
| 1919*-- | 87 | 102 | 9,309 | 138 | 12,846 | 147.66 | 941 | 103.2 | 97,126 | 134.4 | 130, | \% |
| 1920 | 99 | 104 | 10,296 | 114 | 11,737 | 118.56 |  | 104.8 | 103, | 113.4 | 117, | 118.78 |
| 1921 | 102 | 101 | 10,302 | 97 | 9,993 | 97.97 | 1,066 | 92.5 | 98,654 | 88.1 | 86,894 | 81.51 |
| 1922**- | 110 | 113 | 12,430 | 80 | 9,944 | 90.40 | 1,116 | 98.1 | 109,534 | 77.1 | 84,492 | 75.71 |

** Subject to revision December, 1923. * Revisions based on 1919 census.


CHART 26.-SWEET POTATOES: YIELD PER ACRE, N. C. AND U. S.


CHART 27.—SWEET POTATOES: FARM PRICE, N. C. AND U. S.


CHART 28.-SWEET POTATOES: VALUE PER ACRE, N. C. AND U. S.

TABLE VII-HAY (Tame)

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { By } \\ \stackrel{y}{0} \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1866 | 126 | 1. | 163 | 9.04 | 1,4 | 11.75 | 17. | 1.23 | 21,779 | 10.14 | 220,836 | 50 |
|  | 119 | 1.50 |  | 8.6 | 1,546 | 12.96 | 20,0 | 1.31 | 26,277 | 10.21 | 268,301 | 13.40 |
| 186 | 149 | 1.25 | 186 | 11.16 | 2,076 | 13.95 | 21,542 | 1.21 | 26,142 | 10.08 | 263,589 | 12.24 |
| 1869 | 111 | 1.44 | 160 | 9.60 | 1,535 | 13.82 | 18,591 | 1.42 | 26,420 | 10.18 | 268,933 | 14.47 |
| 1869 |  |  | 84 |  |  |  |  |  | 27,316 |  |  |  |
| 70 | 121 | 1.40 | 169 | 10 |  | 14.42 | ,862 | 1.23 | 24,525 | 12.47 | 305,743 | 15.39 |
| 1871 | 74 | 1.13 | 84 | 11.06 | 929 | 12.50 | 19,009 | 1.17 | 22,239 | 14.30 | 317,940 | 16.73 |
| 18 | 75 | 1.20 | 90 | 12.53 | 1,128 | 15.04 | 20,319 | 1.17 | 23,813 | 12.94 | 308,025 | 15.16 |
| 1873 | 79 | 1.20 | 94 | 11.97 | 1,131 | 14.36 | 21,894 | 1.15 | 25,085 | 12.53 | 314,241 | 14.35 |
| 187 | 84 | 1.25 | 05 | 13.37 | 1,401 | 16.71 | 21,770 | 1.15 | 25,134 | 11.94 | 300,222 | 13.79 |
| 75 | 88 | 1.25 | 19 | 10.91 | 1,200 | 13.64 | 23,508 | 1.19 | 27,874 | 10.78 | 300,378 | 12.78 |
| 1876 | 93 | 1.25 | 116 | 10.19 | 1,184 | 12.74 | 25,283 | 1.22 | 30,867 | 8.97 | 276,991 | 10.96 |
| 18 | 93 | 1.35 | 126 | 9.41 | 1,185 | 12.70 | 25,368 | 1.25 | 31,629 | 8.37 | 264,880 | 10.44 |
| 1 | 93 | 1.43 | 133 | 9.66 | 1,285 | 13.81 | 26,931 | 1.47 | 39,608 | 7.20 | 285,016 | 10.58 |
| 1879 | 102 | 1.39 | 142 | 11.22 | 1,593 | 15.60 | 30,631 | 1.30 | 39,862 | 9.31 | 371,045 | 12.11 |
|  | 102 |  | 90 |  |  |  | 30,631 | 1.15 | 35,151 |  |  |  |
| 1880 | 74 | 1.53 | 114 | 10.55 | 1,199 | 16.14 | 25,864 | 1.23 | 31,925 | 11.65 | 371,811 | 14.58 |
|  | 79 | 1.15 | 91 | 15.80 | 1,436 | 18.17 | 30,889 | 1.14 | 35,135 | 11.82 | 415,131 | 13.44 |
| 18 | 81 | 1.19 | 97 | 11.18 | 1,087 | 13.30 | 32,340 | 1.18 | 38,138 | 9.73 | 371,1\%0 | 11.48 |
| 18 | 84 | 1.15 | 96 | 10.77 | 1,039 | 12.39 | 35,516 | 1.32 | 46,864 | 8.19 | 353,834 | 10.81 |
| 18 | 81 | 1.30 | 106 | 10.60 | 1,122 | 13.78 | 38,572 | 1.26 | 48,470 | 8.17 | 396,139 | 10.27 |
| 1885 | 102 | . 95 | 97 | 11. | 1,129 | 11.10 | 39,850 | 1.12 | 44,7 | 8.71 | 389,753 | . 78 |
| 18 | 107 | 1.04 | 111 | 11.00 | 1,223 | 11.44 | 36,502 | 1.15 | 41,796 | 8.46 | 353,438 | 9.68 |
| 18 | 139 | 1.15 | 160 | 10.57 | 1,689 | 12.16 | 37,655. | 1.10 | 41,454 | 9.97 | 413,440 | 10.08 |
| 1888 | 140 | 1.10 | 154 | 13.10 | 2,022 | 14.41 | 38,592 | 1.21 | 46,643 | 8.76 | 408,500 | 10.53 |
| 18 | 170 | 1.00 | 170 | 11.30 | 1,921 | 11.30 | 29,004 | 1.26 | 49,181 | 7.76 | 381,481 | 9.78 |
| 1889 | 170 |  |  |  |  |  | 39,00.4 |  |  |  |  |  |
| 1890 | 170 | 1.35 | 230 | 11.91 | 2,739 | 16.08 | 40,038 | 1.23 | 49,057 | 8.18 | 401,111 | 10.02 |
| 91 | 170 | 1.10 | 187 | 11.00 | 2,057 | 12.10 | 41,258 | 1.18 | 48,759 | 8.89 | 433,276 | 10.50 |
| 1892 | 180 | 1.20 | 216 | 10.55 | 2,279 | 12.66 | 42,191 | 1.17 | 49,238 | 8.95 | 440,710 | 10.45 |
| 1893 | 180 | 1.70 | 306 | 11.11 | 3,400 | 18.89 | 42,413 | 1.31 | 55,575 | 9.48 | 527,044 | 12.43 |
| 1894 | 180 | 1.45 | 261 | 10.93 | 2,853 | 15.85 | 42,772 | 1.18 | 50,468 | S.96 | 452,079 | 10.57 |
| 1895 | 190 | 1. | 310 | 10.14 | 3,143 | 16.53 | 40,832 | 1.02 | 41,83 | 9.46 | 395,647 | 9.63 |
| 1896 | 190 | 1.26 | 239 | 10.75 | 2,569 | 13.54 | 40,978 | 1.33 | 4,38 | 7.48 | 406,957 | 9.93 |
| 1897 | 200 | 1.25 | 250 | 9.75 | 2,438 | 12.19 | 41,336 | 1.42 | 58,87 | 7.28 | 428,919 | 10.38 |
| 1898 | 200 | 1.70 | 340 | 9.30 | 3,162 | 15.81 | 43,120 | 1.55 | 66,772 | 6.63 | 442,905 | 10.27 |
| 1899 | 204 | 1.50 | 306 | 10.10 | 3,091 | 15.15 | 43,127 | 1.33 | 57,450 | 8.20 | 470,844 | 10.92 |
| 1899 | 204 | 1.03 | 211 |  |  |  | 49,127 | 1.25 | ,820 |  |  |  |
| 1900 | 200 | 1.41 | 282 | 11.20 | 3,158 | 15.79 | 42,0 | 1.27 | 53,2 | 9.72 | 7,399 | 12.30 |
| 1901 | 210 | 1.66 | 349 | 10.80 | 3,769 | 17.93 | 42,066 | 1.33 | 55,819 | 9.91 | 553,328 | 13.15 |
| 1902 | 220 | 1.44 | 317 | 12.25 | 3,883 | 17.64 | 42,962 | 1.52 | 65,29 | 9.19 | 599,781 | 13.96 |
| 1903 | 230 | 1.60 | 368 | 13.42 | 4,939 | 21.47 | 43,400 | 1.57 | 68,154 | 9.35 | 637,485 | 14.69 |
| 1904 | 240 | 1.72 | 413 | 14.56 | 6,013 | 25.04 | 44,645 | 1.55 | 69,192 | 8.91 | 616,369 | 13.81 |
| 1905 | 250 | 1.60 | 400 | 12.80 | 5,120 | 20.48 | 45,991 | 1.59 | 72,973 | 8.50 | 627,023 | 13.63 |
| 1906 | 260 | 1.54 | 400 | 15.00 | 6,000 | 23.10 | 47,891 | 1.39 | 66,341 | 10.43 | 692,116 | 14.45 |
| 1907 | 270 | 1.50 | 405 | 16.50 | 6,682 | 24.75 | 49,098 | 1.47 | 72,261 | 11.78 | 850,915 | 17.33 |
| 1908 | 300 | 1.50 | 450 | 13.50 | 6,075 | 20.25 | 51,196 | 1.53 | 78,440 | 9.14 | 716,644 | 14.00 |
| 1909 | 315 | 1.33 | 435 | 14.40 | 6,264 | 19.87 | 51,041 | 1.46 | 74,384 | 10.58 | 786,722 | 15.41 |
| 1909 | 315 | . 95 | 299 |  |  |  | 51,0.41 | 1.35 | 68,833 |  |  |  |
| 1910 | 315 | 1.50 | 472 | 14.60 | 6,891 | 21.90 | 51,015 | 1.36 | 69,378 | 12.14 | 842,252 | 16.51 |
| 1911 | 290 | 1.05 | 304 | 17.00 | 5,168 | 17.85 | 48,240 | 1.14 | 54,916 | 14.29 | 784,926 | 16.27 |
| 1912 | 293 | 1.30 | 381 | 16.70 | 6,363 | 21.71 | 49,530 | 1.47 | 72,691 | 11.79 | 856,695 | 17.30 |
| 113 | 320 | 1.31 | 419 | 16.50 | 6,914 | 21.62 | 48,954 | 1.31 | 64,116 | 12.43 | 797,077 | 16.28 |
| 91 | 320 | 1.15 | 368 | 17.10 | 6,293 | 10 | 49,145 | 1.43 | 70,071 | 11. |  | 15.85 |
| 1915 | 350 | 1.85 | 648 | 16.50 | 10,692 | 30.52 | 51,10s | 1.68 | 85,920 | 10.63 | 913,644 | 17.85 |
| 1916 | 440 | 1.30 | 572 | 17.50 | 10,010 | 22.75 | 55,721 | 1.64 | 91,192 | 11.22 | 1,022,930 | 18.36 |
| 1917 | 50 | 1.13 | 572 | 19.70 | 11,268 | 22.26 | 55,203 | 1.51 | 53,308 | 17.09 | 1,423,766 | 25.79 |
| 1918 | 640 | 1.20 | 768 | 21.00 | 16,128 | 25.20 | 55,755 | 1.37 | 76,660 | 20.13 | 1,543,494 | 27.6 |
| 191 | 682 | 1. | 696 | 24 | 16,843 | 24.68 | 56,885 | 1.52 | 86,359 | 20.08 | 1,734,085 | 30.48 |
| - |  |  |  |  |  |  |  |  |  |  |  |  |
| 1920 | 640 | 1.05 | 672 | 23.00 | 15,456 | 24.15 | ,101 | 1.51 | 87,855 | 17.7 | 1,560,235 | 26.55 |
| 19, | 090 | 1.30 |  | 19.80 | 17,761 | 25.74 | 28,769 | 1.40 | 82,379 | 12.11 | 997,527 | 16.97 |
| 1922**- | 800 | 1.40 | 1,120 | 18.20 | 20,384 | 25.48 | 61,208 | 1.58 | 90,687 | 12.59 | 1,217,044 | 19.88 |

* Revisions based on 1919 census.
** Subject to revision December, 1923.


CHART 29.-HAY, TAME: YIELD PER ACRE, N. C. AND U. S.


CHART 30.-HAY, TAME: FARM PRICE, N. C. AND U. S.

Hay. There have been many ups and downs in the average yield per acre (chart 29) of tame hay in North Carolina, though the general trend for the United States has been in the main steadily upward. We are at present on the upward path, but there has been a big decline from our levels around 1904, when we reached our top notch. Comparing the averages for 1913-22 and 1866-75, we find that Nerth Carolina has declined in rield per acre 1.6 percent while the United States has gained 22.2 percent. We shall have to change this condition when we increase our livestock to the extent that is becoming urgently necessary. Our farm price per ton of hay (chart 30 ) has been almost constantly considerably higher than the United States average, and has increased 78.2 percent, while the United States has gained in price of hay per ton only 25.6 percent. Consequently our value per acre of hay (chart 31) has been almost uniformly much above the United States average and our gain, comparing the decades $1866-75$ and 1913-22, has been 74.0 per-


CHART 31.-HAY, TAME: VALUE PER ACRE, N. C. AND U. S.

TABLE VIII-COTTON*

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { H. } \\ \stackrel{\text { Ej}}{2} \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| 1866 | 386 | 250 | 91 |  |  |  |  | 29.0 | 1,750 |  |  |  |
| 1867 | 559 | 160 | 150 |  |  |  | 7,82S | 189.8 | 2,340 |  |  |  |
| 1868 | 380 | 176 | 140 |  |  |  | 6,799 | 192.2 | 2,380 |  |  |  |
| 1869 | 418 | 145 | 145 |  |  |  | 7,743 | 196.9 | 3,012 |  |  |  |
| 1870 | 452 | 175 | 170 |  |  |  | 8, | 198.9 | 3,800 |  |  |  |
| 1871 | 388 | 143 | 127 |  |  |  | 7,558 | 148.2 | 2,553 |  |  |  |
| 1872 | 451 | 173 | 180 |  |  |  | 8,483 | 185.7 | 3,920 |  |  |  |
| 1873 | 514 | 159 | 176 |  |  |  | 9,510 | 179.7 | 3,683 |  |  |  |
| 1874 | 609 | 172 | 238 |  |  |  | 11,764 | 147.5 | 3,941 |  |  |  |
| 1875 | 621 | 156 | 218 |  |  |  | 11,934 | 190.6 | 5,123 |  |  |  |
| 1876 | 609 | 184 | 210 | 9.0 | 10,085 | 16.56 | 11,677 | 167.8 | 4,438 | 9.0 | 174,724 | 14.96 |
| 1877 | 585 | 186 | 242 |  |  |  | 12,133 | 163.8 | 4,370 |  |  |  |
| 1878 | 590 | 169 | 222 | 8.4 | S,383 | 14.20 | 12,344 | 191.2 | 5,244 | 8.2 | 192,515 | 15.59 |
| 1879.-- | 893 | 156 | 390 | 11.0 | 15,327 | 17.16 | 14,480 | 181.0 | 5,755 | 10.3 | 269,305 | 18.60 |
| 1880 | 974 | 198 | 411 | 10.0 | 19,276 | 19.80 | 15,951 | 184.5 | 6,343 | 9.8 | 289,083 | 18.12 |
| 1881--- | 1,061 | 150 | 380 |  |  |  | 16,711 | 149.8 | 5,456 |  |  |  |
| 1882.-- | 1,051 | 194 | 463 | 9.5 | 19,362 | 18.43 | 16,277 | 185.7 | 6,957 | 9.1 | 275,513 | 16.93 |
| 1883 | 1,051 | 177 | 398 | 9.3 | 17,293 | 16.46 | 16,778 | 164.8 | 5,701 | 9.1 | 250,977 | 14.96 |
| 1884--- | 1,061 | 175 | 404 | 9.3 | 17,269 | 16.28 | 17,440 | 153.8 | 5,682 | 9.2 | 246,575 | 14.14 |
| 1855--- | 1,072 | 157 | 407 | 8.5 | 14,301 | 13.34 | 18,301 | 164.4 | 6,575 | 8.4 | 251,775 | 13.76 |
| 1886 | 1,072 | 157 | 366 | 8.3 | 13,965 | 13.03 | 18,455 | 169.5 | 6,446 | 8.1 | 251,856 | 13.65 |
| 1887 | 1,066 | 191 | 444 | 8.7 | 17,719 | 16.62 | 18,641 | 182.7 | 7,020 | 8.5 | 290,901 | 15.61 |
| 1888 | 1,072 | 165 | 365 | 8.5 | 15,030 | 14.02 | 19,059 | 180.4 | 6,941 | 8.5 | 292,139 | 15.33 |
| 1889 | 1,14\% | 98 | 336 | 8.5 | 9,556 | 8.33 | 20,175 | 159.7 | 7,473 | 8.5 | 275,249 | 13.64 |
| 1890.-- | 1,082 | 182 | 490 | 8.7 | 17,135 | 15.83 | 19,512 | 187.0 | 8,674 | 8.6 | 313,360 | 16.06 |
| 1891 | 1,017 | 178 | 415 | 7.4 | 13,399 | 13.17 | 19,059 | 179.4 | 9,018 | 7.2 | 247,633 | 12.99 |
| 1892 | 773 | 183 | 300 | 8.6 | 12,167 | 15.74 | 15,911 | 209.2 | 6,664 | 8.3 | 277,194 | 17.42 |
| 1893 | 1,180 | 174 | 400 | 7.2 | 14,783 | 12.53 | 19,525 | 149.9 | '7,493 | 7.0 | 204,983 | 10.50 |
| 1894 | 1,297 | 210 | 455 | 5.0 | 13,613 | 10.50 | 23,688 | 195.3 | 9,476 | 4.6 | 212,335 | 8.96 |
| 1895 | 1,050 | 168 | 398 | 8.2 | 14,467 | 13.78 | 20,185 | 155.6 | 7,161 | 7.6 | 238,503 | 11.82 |
| 1896 | 1,229 | 208 | 522 | 6.7 | 17,096 | 13.94 | 23,273 | 184.9 | 8,533 | 6.7 | 286,169 | 12.30 |
| 1897 | 1,302 | 184 | 647 | 7.0 | 16,775 | 12.88 | 24,320 | 182.7 | 10,898 | 6.7 | 296,816 | 12.20 |
| 1898 | 1,312 | 227 | 630 | 5.9 | 17,568 | 13.39 | 24,967 | 220.6 | 11,189 | 5.7 | 315,449 | 12.63 |
| 1899* | 1,087 | 193 | 440 | 7.2 | 15,854 | 13.90 | 24,275 | 183.8 | 9,345 | 7.0 | 326,215 | 13.41 |
| 1900 | 1,143 | 199 | 477 | 9.4 | 22,432 | 18.71 | 24,933 | 194.4 | 10,123 | 9.2 | 463,310 | 18.58 |
| 1901 | 1,395 | 142 | 416 | 7.2 | 14,969 | 10.22 | 26,774 | 170.0 | 9,510 | 7.0 | 334,088 | 12.48 |
| 1902 | 1,111 | 236 | 550 | 8.0 | 21,982 | 18.88 | 27,175 | 187.3 | 10,631 | 7.6 | 403,718 | 14.86 |
| 1903 | 1,201 | 210 | 529 | 10.6 | 28,021 | 12.26 | 27,052 | 174.3 | 9,851 | 10.5 | 516,763 | 19.10 |
| 1904 | 1,439 | 233 | 704 | 9.2 | 32,373 | 21.44 | 31,215 | 205.9 | 13,438 | 9.0 | 603,438 | 19.33 |
| 1905 | 1,230 | 240 | 619 | 10.8 | 33,434 | 25.92 | 27,110 | 186.6 | 10,575 | 10.8 | 569,791 | 21.02 |
| 1906 | 1,374 | 201 | 579 | 9.5 | 27,518 | 19.10 | 31,374 | 202.5 | 13,274 | 9.6 | 635,534 | 20.26 |
| 1907-- | 1,408 | 205 | 605 | 10.2 | 30,871 | 20.91 | 29,660 | 179.1 | 11,107 | 10.4 | 575,226 | 19.39 |
| 1908 | 1,458 | 211 | 647 | 9.0 | 29,113 | 18.99 | 32,444 | 194.9 | 13,242 | 8.7 | 575,092 | 17.73 |
| 1509 | 1,359 | 210 | 601 | 13.9 | 41,742 | 29.19 | 30,938 | 154.3 | 10,005 | 13.9 | 697,681 | 22.55 |
| 1910 | 1,478 | 227 | 706 | 14.1 | 49,783 | 32.01 | 32,403 | 170.7 | 11,609 | 14.1 | 820,407 | 25.32 |
| 1911 | 1,624 | 315 | 1,076 | 8.8 | 47,336 | 27.72 | 36,045 | 207.7 | 15,693 | 8.8 | 687,888 | 19.08 |
| 1912--- | 1,545 | 267 | 866 | 12.2 | 52, 805 | 32.57 | 34,283 | 190.9 | 13,703 | 11.9 | 817,055 | 23.83 |
| 1913 | 1,576 | 239 | 793 | 12.6 | 49,930 | 30.11 | 37,089 | 182.0 | 14,156 | 12.2 | 802,708 | 23.26 |
| 1914 | 1,527 | 290 | 931 | 6.9 | 32,107 | 20.01 | 36,832 | 209.2 | 16,135 | 6.8 | 549,036 | 14.91 |
| 1915. | 1,282 | 260 | 699 | 11.2 | 39,172 | 29.12 | 31,412 | 170.3 | 11,192 | 11.3 | 631,460 | 20.10 |
| 1916 | 1,451 | 215 | 655 | 19.4 | 63,496 | 41.71 | 34,985 | 156.6 | 11,450 | 19.6 | 1,122,295 | 32.08 |
| 1917 | 1,515 | 194 | 618 | 27.7 | 85,591 | 53.74 | 33,841 | 159.7 | 11,302 | 27.7 | 1,566,198 | 46.28 |
| 1918 | 1,600 | 268 | 898 | 26.4 | 118,504 | 70.75 | 36,008 | 159.6 | 12,041 | 27.6 | 1,663,633 | 46.20 |
| 1919 | 1,490 | 266 | 830 | 35.2 | 146,232 | 93.63 | 33,566 | 161.5 | 11,421 | 35.6 | 2,034,658 | 60.62 |
| 1920 | 1,587 | 275 | 925 | 14.5 | 67,045 | 39.88 | 35,878 | 178.4 | 13,440 | 13.9 | 933,658 | 26.02 |
| 1921 | 1,403 | 264 | 776 | 16.4 | 63,650 | 43.30 | 30,509 | 124.5 | 7,954 | 16.2 | 643,933 | 21.05 |
| 1922** | 1,626 | 250 | 852 | 24.5 | 104,370 | 61.25 | 33,742 | 141.6 | 9,964 | 23.8 | 1,192,461 | 35.21 |

[^3]cent, while the United States gain in value per acre of this crop has been 53.4 percent. These high prices for hay in North Carolina account for the fact that while our hay production in 1917-21 constituted only nine-tenths of one percent of the entire United States crop the value of our crop represented in these years 3.7 percent of our aggregate crop values.

Cotton. Conditions with regard to our cotton crop are changing so radically and so rapidly that it is impossible to forecast the future from the past. In 1917-21 our cotton crop constituted 7.2 percent of the United States total cotton crop, and the value of our cotton crop was 22.8 percent of our aggregate crop values. Furthermore in the last two years we have been among the leading five states in the production of cotton-not because of gains on our part, but because of greater losses on the part of states that have succumbed more completely to the boll weevil than we have as yet. But that our history in this crop will paral-

lel that of the other cotton states when struck by the boll weevil, can hardly be doubted. Chart 32 shows the trend of our yield per acre mounting steadily and rapidly almost without break until 1920, but the decline since that date is ominous. It sounds the crack of doom unless we reorganize our farming system, improve our marketing methods, and raise our level in livestock and dairy farming.

Comparing the decades 1866-75 and 1913-22, we will be seen to have gained in per-acre yield of cotton 47.4 percent, while the United States has declined 6.7 percent in per-acre yield.

The cotton market is a world market, consequently prices in North Carolina and the United States have kept very closely together (chart 33). The gain in both the state and the United States in price per pound in the period considered has been close to 108 percent. Because of our high yields, however, our gain in value per acre (chart 34) has been 192.5 percent, while the United States gain has been 105.1 percent.

But this it must be borne in mind is past history, and the future is all unknown.

Tobacco. Unlike our cotton yield, our tobacco yield per acre is by $n o$ means high (chart 35). Moreover, a comparison of the two decades 1866-75 and 1913-22 shows that we have gained only 9.0 percent in yield per acre, while the United States gain is 12.5 percent. It is to our large tobacco acreage that we owe our position among the five leading tobacco states, and our production of 23.2 percent of the total United States crop on an average for the years 1917-21. This large production brought the value of our tobacco crop in these years up to over a quarter of our aggregate state crop values (25.7 percent).

Our price per pound has been uniformly somewhat above the United States price per pound (chart 36) ; but, because of our comparatively low yield per acre, our value per acre (chart 37) has been until recent years considerably below the United States average. However, within the last five years our gains in farm price per pound have been such as to put us above the United States average in value per acre. Comparing the decades 1866-75 and 1913-22, North Carolina is found to have gained in price per pound 134.6 percent, and the United States 120.1 percent ; and in



CIART 34.-COTTON: VALUE PER ACRE, N. C. AND U. S., $1876-1922$

TABLE IX—TOBACCO

|  | NORTH CAROLINA |  |  |  |  |  | UNITED STATES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { H } \\ & \stackrel{\omega}{0} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| 1866 |  | 683 -- |  | 14.3 | ---- | 97.6 | ------- | 735.8 | ------- | 9.6 | ------- | 71.91 |
| 1867--- |  | 652657508 |  |  | ------- | $\begin{aligned} & 80.85 \\ & 81.47 \\ & 5 . .37 \end{aligned}$ | -------- | $634.6$$751.4$ | ---------- | 9.49.39.3 | --------- | $\begin{aligned} & 59.82 \\ & 69.81 \\ & 53.05 \end{aligned}$ |
| 1868 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1869 |  |  |  | 10.9 |  |  |  |  |  |  |  |  |
| 1870 |  | 586 |  | 12.7 |  |  |  | \%57.9 | ------- | 9.6 |  |  |
| 1871 |  | 599 |  | 9.3 |  | 5. |  | 750.3 |  | 8.8 |  | 40 |
|  |  | 591 |  | 8.9 |  | 2 |  |  |  |  |  |  |
| 1874 |  | 330 |  | 14.4 |  | 47.52 |  | 633.2 |  | 7.6 |  | 59.10 |
| 5 |  | $\begin{aligned} & 500 \\ & 550 \end{aligned}$ |  | 8.5 |  | $\begin{array}{r} 42.50 \\ 4.50 \end{array}$ |  | $\begin{aligned} & 678.6 \\ & 705.0 \end{aligned}$ | --- | $\begin{aligned} & 7.0 \\ & 6.8 \end{aligned}$ | ------- | $\begin{aligned} & 47.32 \\ & 47.97 \end{aligned}$ |
| 76 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1877 |  | -- |  | 8.2 |  | $\begin{aligned} & 37.20 \\ & 38.92 \end{aligned}$ |  | T2S. 1 | - | $\begin{aligned} & ---\mathbf{5 . 6} \\ & 5.8 \end{aligned}$ | --------- | ---70-70 |
| 1878 |  | 620 |  | 6.0 |  |  |  |  |  |  |  |  |
| 1879 |  | 556 |  |  |  |  |  | 795.1740.7 | ------- |  |  | 46.18 |
| 1880 |  |  |  | $7.0$ |  | $50.85$ |  |  |  | 5.8 |  | 60.44 |
| 1 |  | 443 |  | 9.0 13.5 |  |  |  | $\begin{aligned} & 740.7 \\ & 696.2 \end{aligned}$ |  | 9.6 | --------- | 67.11 |
| 82 |  | 500 |  | $\begin{aligned} & 12.0 \\ & 12.5 \end{aligned}$ |  | 69.00 |  | 764.1 | --------- | $\begin{aligned} & 8.4 \\ & 9.0 \end{aligned}$ | --------- |  |
| 188 |  | St |  |  |  | 60.50 |  | 47.2 |  |  |  |  |
| 1884 |  | 01 |  |  |  | 57.62 |  |  |  | 8.2 | --------- | 60.94 |
| 1885 |  | $\begin{aligned} & 480 \\ & 490 \end{aligned}$ |  | 11.5 |  |  |  | 747.8 |  | 7.7 |  | 57.49 |
| 88 |  |  |  | 10.6 9.5 |  | 39.90 |  | 709.9 |  | 7.4 |  | 2.61 |
|  |  | 8. |  | $\begin{array}{r} 9.0 \\ 10.0 \end{array}$ |  | 5. 5 |  |  | ------- | ${ }^{10.6}$ | ------- | 68.47 |
| 888 |  | 151 |  | $\begin{array}{r} 0.0 \\ 10.0 \end{array}$ |  | 33.8248.73 |  |  |  |  |  | 58.43 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1890 |  | 560 |  | 11.0 |  | 61.60 |  | S |  | 8. 3 |  | 59.34 |
| 1891 |  | 490 |  | $9.5$ |  | $\begin{aligned} & 47.04 \\ & 46.08 \end{aligned}$ | ------ | $\begin{aligned} & 747.4 \\ & 697.6 \\ & 687.1 \end{aligned}$ | ------- | 8.5 9.3 | ------- | 63.93.55 .70 |
| 92 |  |  |  |  |  | $40.72$ |  |  |  | $\begin{aligned} & 8.1 \\ & 6.0 \end{aligned}$ |  |  |
| 1894 |  | 662 |  | 9.0 |  |  |  | ${ }^{6877.1}$ | ------- |  | ---------- | ${ }^{53.07}$ |
| 95 |  | 800 |  | $\begin{aligned} & 9.2 \\ & 8.0 \end{aligned}$ |  | $\begin{aligned} & 73.60 \\ & 40.80 \end{aligned}$ |  | $\begin{aligned} & 775.4 \\ & 677.6 \end{aligned}$ | --------- | $\begin{aligned} & 7.2 \\ & 6.0 \end{aligned}$ | --------- | 56.1240.79 |
| 96 |  |  |  |  |  |  | ------- |  |  |  |  |  |
| 1897 |  | 550 |  | ------ |  | $------$ |  | $\begin{aligned} & 645.9 \\ & 745.4 \end{aligned}$ | -------- |  | --------- |  |
|  |  |  |  |  |  |  |  | $\begin{aligned} 128.5 \\ 788.5 \end{aligned}$ | $-868,113$ |  |  |  |
| 1899 1899 |  |  | 127,503 | 6.6 |  |  |  |  |  | 7.2 | $62,104$$53,661$ |  |
| 1900 | 193 | 618 |  |  |  | $\begin{aligned} & 43.26 \\ & 50.40 \end{aligned}$ | $\begin{aligned} & 1,046 \\ & 1,039 \end{aligned}$ | $\begin{aligned} & 6778.0 \\ & 9788.0 \\ & 97797.3 \\ & 878.6 \\ & 8889.3 \\ & 6819.0 \end{aligned}$ | $\begin{aligned} & 814,345 \\ & 818,953 \\ & 821,824 \\ & 815,972 \\ & 660,461 \end{aligned}$ | $\begin{aligned} & 6.6 \\ & 7.1 \\ & 7.0 \\ & 6.8 \\ & 8.1 \end{aligned}$ |  |  |
| 1901 | 199 | 560 | 105,8 | 7.0 9.0 | $\begin{aligned} & 8,096 \\ & 9,714 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 53,661 \\ & 58,283 \\ & 57,564 \\ & 55,515 \\ & 53,383 \end{aligned}$ | $\begin{aligned} & 51.28 \\ & 56.08 \\ & 55.85 \\ & 53.50 \\ & 66.20 \end{aligned}$ |
| 1902 | 219 | 650 | 142,521 | 7.0 | 9,976 | 45.50 | 1,031 |  |  |  |  |  |
| 1903 | 215 | 627 | 134,729 | 6.3 | 8,483 | 39.50 |  |  |  |  |  |  |
| 1904 | 144 | 685 | 98,18 |  | 8,481 | 58.91 |  |  |  |  |  |  |
| 1905 | 137 | $\begin{aligned} & 608 \\ & 580 \end{aligned}$ | 83,156 | 8.810.0 | $\begin{array}{r} 7,318 \\ 6,981 \\ 11,096 \end{array}$ | $\begin{aligned} & 53.50 \\ & 58.00 \\ & 68.75 \\ & 70.35 \\ & 57.00 \end{aligned}$ | $\begin{array}{r} 776 \\ 7961 \\ 821 \\ 875 \\ 1,180 \\ 1,295 \end{array}$ | $\begin{aligned} & 815.6 \\ & 857.2 \\ & 850.5 \\ & 820.2 \\ & 80.4 \\ & 815.3 \end{aligned}$ | $\begin{array}{r} 633,034 \\ 682,429 \\ 698,126 \\ 718,061 \\ 949,357 \\ 1,055,765 \end{array}$ | $\begin{array}{r} 8.5 \\ 10.0 \\ 10.2 \\ 10.3 \end{array}$ |  | 68.96 |
| 1906 | 120 |  | 69,808 |  |  |  |  |  |  |  |  |  |
| 1907 | 161 |  | 100,875 | 11.0 |  |  |  |  |  |  | 71,411 | 87.00 |
|  | , |  | 134,000 | 10.5 | 14,070 |  |  |  |  |  |  |  |
| 1909 | 240 |  | 144,000 |  |  |  |  |  |  |  |  | 81.10 |
| 1909 | 228 | 626 | 138,813 | 9.5 | 13,187 |  |  |  |  | 10.1 | 106, |  |
| 1910 | 200 | 60 | 120,000 | 10.6 | 12,720 | 63.60 | 1,060 | 807 | 1,103 | 9.3 | 02,142 | 4.77 |
| 1911 | 140 | 710 | 99,400 | 11.6 | 11,530 | 82.36 | 1,013 | -3.7 | 905,10 | 9.4 | 85,210 |  |
| 1912 | 179 |  | 110,980 | 16.0 | 17,757 | 99.20 | 1,226 | 785.5 | 962,855 | 10.8 | 104,063 | 84.89 |
| 1913 | 250 | 670 | 167,500 | 18.5 | 30,988 | 123.95 | 1,216 | 784.3 | 953,734 | 12.8 | 122,481 | 100.72 |
| 14 | 200 | 0 | 172,250 | 11.5 | 19,809 | 74.75 | 1,22 | 5.7 | 1,034,679 | 9.8 | 101,411 | 82.89 |
| 1915 | 320 |  | 198,400 | 11.2 | 22,221 | 69.44 | 1,370 | 775.4 | 1,062,23 | 9.1 | 96,281 |  |
| 1916 | 320 | 550 | 176,000 | 20.0 | 35,200 | 110.00 | 1,413 | 816.0 | 1,153,278 | 14.7 | 169 | 120.05 |
| 1917 | 380 | 630 | 239,400 | 31.5 | 75,411 | 198.45 |  |  | 1,249,27 | 24. |  |  |
| 1918 | 46 | 705 | 329,940 | 35.1 | 115,809 | ${ }_{33018}^{247.46}$ | 1,647 | 75181 | $1,439,071$ $1,465,481$ | 28.0 39.0 |  |  |
| 1919*- | 52 |  | 325,248 | 53.6 | 174,333 | 330.18 | 1,864 | 736.6 | 1,372,993 |  | 570,868 | 292.60 |
| 1919 |  |  | 280,163 |  | 109, | 17 |  | 7.3 | 1,582,225 |  | 335,675 |  |
| 1920 | 625 | 694 | $\begin{aligned} & 433,750 \\ & 252,450 \end{aligned}$ | . | 65,637 | 145.8 | 1,427 | 749.6 | 1,069,693 | 19.9 | 212,72 | 171.26 149.07 |
| $1921-$ | 450 515 | 561 | 252,450 | , | 93,003 | 180.5 | 1, | 768.0 | 1,324,840 | 23.1 | 306,1 | 177.50 |

* Revisions based on 1919 census.
**. Subject to revision December, 1923.



CHART 36.-TOBACCO: FARM PRICE, N. C. AND U. S.

Agricultural Graphics

value per acre North Carolina has gained 157.3 percent and the United States only 146.9 percent.

Our tobacco future like our cotton future is problematic, and we would do well not to build too confidently on continued prosperity sourced predominantly in this crop.
5. Other Crops. Other crops than the eight crops already considered constitute a little over a fifth ( 20.4 percent) of the aggregate (hypothetical) crop values in North Carolina on an average for the five-year period 1917-21 (chart 5). For these other crops statistics back to 1866 are not available except for rye and buckwheat; and the value of rye and buckwheat in North Carolina is so small that they have not been included in the detailed tables and charts of this bulletin. Rye represented only two-tenths of one percent of our aggregate crop values in the five-year period 1917-21 (which includes the war period of increased grain production), and buckwheat represented a much smaller quantity even than this.

Of considerably greater importance is the value of our peanut crop. We stand among the first five states in the production of peanuts; but comparable statistics for this crop have been compiled only since 1916. On an average for the five-year period 1917-21, the value of our peanuts amounted to nearly ten and three-quarters million dollars, and this represented two and a half percent of our aggregate crop values and an eighth of the value of all the crops other than those which have been tabulated and charted in this bulletin.

Cowpeas, soy beans, and sorghum sirup also represent appreciable percentages in our crop values.

Fruit and truck crops have not been reported statistically in a way that makes it possible to include them in tables covering any considerable number of years. They are very important in particular localities, but do not represent large proportions of our aggregate crop values.

## II . Livestock

The subject of our livestock becomes increasingly important as our production of cash crops becomes endangered by bollweevil ravages and other uncertainties. It may even be to our advantage to have our attention forcibly directed to this mat-

TABLE Ḱ-HORSES AND MULES ON FARMS

| HORSES |  |  |  |  |  |  | MULES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NORTH CAROLINA |  |  |  | UNITED STATES |  |  | $\begin{aligned} & \text { NORTH } \\ & \text { CAROLINA } \end{aligned}$ |  |  | UNITED STATES |  |  |
| $\begin{gathered} \text { बีं } \\ \underset{\sim}{8} \end{gathered}$ |  |  |  |  |  |  | है |  |  |  |  |  |
|  | 99 | 57.8 | 5,740 | 5,401 | 59.05 | 318,92 | 33 | 63.37 |  |  |  |  |
| 1868 | 98 | 50 |  |  | 54.27 | 312,416 | 3 | 58.87 | 2,063 | - 822 | 66.94 56.04 |  |
| 1869 | 98 | 67.77 | 6,672 | 6,333 | 62.57 | 396,222 | 34 | S3.16 |  |  |  |  |
| 1870 | 126 | 76.46 |  | 8,249 | 67.43 |  |  | 96.21 | 4,195 | 1,180 | 90.42 |  |
| $18 \% 0$ | 103 |  |  | 7,145 |  |  |  |  |  |  |  |  |
|  | 127 | 81.67 | 10,348 | 8,702 | 71.14 | 619,039 | 44 | 103.37 |  |  | 91.98 |  |
| 18 | 130 | 82.99 | 10,830 | 8,991 | 67.41 | 606,111 | 46 | 101.76 |  |  |  |  |
| 1873 | 132 | 80.33 | 10,587 | 9,222 | 66.39 | 612,273 | 48 | 99.84 | 4,742 | 1,310 | 85.15 | 111,546 |
| 18 | 132 | 76.90 | 10,135 | 9,334 | 65.15 | 608,073 | 48 | 93.53 | 4,527 | 1,339 | 81.35 | 108,953 |
|  | 133 | 70.23 | 9,348 | 9,504 | 61.10 | 580,708 | 49 | 85.43 | 4,212 | 1,394 | 71 | 100,197 |
| 1576 | 140 | 65.82 | 9,195 | 9,935 | 57.29 |  | 52 | 72.47 | 3,747 | 1,414 | 66.46 | 94,001 |
|  | 141 | 65.15 | 9,187 | 10,155 | 55.83 | 567,017 | 53 | 68.46 | 3,608 | 1,444 | 64.07 |  |
| 1878 | 142 | 65.28 | 9,296 | 10,330 | 56.63 | 584,999 | 55 | 68.64 | 3,796 | 1,638 | 62.03 | 101,579 |
| 187 | 145 | 56.54 | 8,210 | 10,939 | 52.36 | 572,712 | 74 | 60.13 | 4,450 | 1,713 | 56.00 | 95,942 |
| 1880 | 147 | 59.22 | 8,688 | 11,202 | 54.75 |  | 75 | 61.65 | 4,605 | 1,730 | 61.26 | 105,948 |
| 1880 | 134 |  |  | 10,357 |  |  | 82 |  |  | 1,513 |  | 105,018 |
| 18 | 147 | 67.31 | 9,874 | 11,430 | 58.44 | 667,954 |  |  | 5,576 | 1,721 | 69.79 | 120,096 |
| 1882 | 134 | 65.30 | 8,773 | 10,522 | 58.53 | 615,825 | 82 | 73.64 | 6,059 | 1,835 | 71.35 | 130,945 |
| 1883 | 136 | 72.30 | 9,811 | 10,838 | 70.59 | 765,041 | 82 | 91.66 | 7,542 | 1,871 | 79.49 | 148,732 |
| 18 | 137 | 77.21 | 10,582 | 11,170 | 74.64 | 833,734 | 85 | 84.32 | 7,146 | 1,914 | 84.2 | 161,215 |
| 1885 | 141 | 77.71 | 10,970 | 11,565 | 73.70 | 852,283 |  | 84.47 | 7,230 | 1,973 | 82.38 | 162,497 |
|  | 43 | 74.53 | 10,626 | 12,078 | 71.27 |  | 86 | 83.19 | 7,192 | 2,053 | 79.60 | 163,381 |
| 188 | 143 | 75.14 | 10,713 | 12,497 | 72.15 | 901,686 | 88 | 79.32 | 6,994 | 2,117 | 78.91 | 167,058 |
| 1888 | 150 | 74.59 | 11,167 | 13,173 | 71.82 | 946,096 | 90 | 84.13 | 7,567 | 2,192 | 79.78 | 174,854 |
| 188 ? | 151 | 76.58 | 11,579 | 13,663 | 71.89 | 982,195 | 91 | 84.90 | 7,712 | 2,25S | 79.49 | 179,444 |
| 18 | 154 | 73.58 | 11,347 | 14,214 | 68.84 | 978,517 | 96 | 81.84 | 7,881 | 2,331 | 73.25 | 182,394 |
| 1890 | 131 |  |  | 14,969 |  |  | 99 |  |  | 2,296 |  |  |
| 991 | 147 | 78.25 | 11,465 | 14,057 | 67.00 | 9 | 98 | 88.94 | 8,735 | 2,297 | 77.88 | 178,847 |
| 92 | 132 | 78.62 | 10,367 | 15,498 | 65.01 | 1,007,594 | 100 | 88.13 | 8,829 | 2,315 | 75.5 | 174,882 |
| 1893 | 133 | 77.67 | 10,344 | 16,207 | 61.22 | 992,225 | 100 | 86.49 | 8,630 | 2,331 | 70.68 | 164,764 |
| 189 | 135 | 72.20 | 9,712 | 16,081 | 47.83 | 769,225 | 110 | 77.64 | 8,522 | 2,352 | 62.17 | 146,233 |
| 18 | 140 | 55.05 | 7,702 | 15,893 | 36.29 | 576,731 | 110 | 58.79 | 6,452 | 2,333 | 47.55 | 110,928 |
| 1896 | 144 | 54.36 | 7,833 | 15,124 | 33.07 | 500,140 | 111 | 59 |  | 2,279 | 45.29 | 103,204 |
| 1897 | 146 | 44.76 | 6,515 | 14,365 | 31.51 | 452,649 | 111 | 49. | 5,541 | 2,216 | 41.66 | 92,302 |
| 1898 | 147 | 47.16 | 6,932 | 13,961 | 34.26 | 478,362 | 113 | 53.64 | 6,036 | 2,190 | 43.88 | 96,110 |
| 18 | 147 | 47.96 | 7,036 | 13,665 | 37.40 | 511,075 | 111 | 55.65 | 6,199 | 2,134 | 44.96 | 95,963 |
| 1900 | 148 | 53.50 | 7,927 | 13,538 | 44.61 | 603,969 | 113 | 63.47 | 7,142 | 2,086 | 53.55 | 111,717 |
| 1900 | 15 |  |  | 18,267 |  |  | 136 |  |  | 3,265 |  |  |
| 1901 | 167 | 65.46 | 10, | 16,745 | 5 | 885,200 | 138 | 77.67 | 10,723 | 2,864 | 63.97 | 183,232 |
| 1902 | 164 | 66.99 | 10,991 | 16,531 | 58.61 | 968,935 | 137 | 80.13 | 10,953 | 2,757 | 67.61 | 186,412 |
| 1903 | 162 | 71.16 | 11,558 | 16,557 | 62.25 | '1,030,706 | 138 | 85.54 | 11,809 | 2,728 | 72.49 | 197,753 |
| 1904 | 161 | 81.06 | 13,035 | 16,736 | 67.93 | 1,136,940 | 132 | 95.65 | 13,337 | 2,758 | 78.88 | 217,533 |
|  | 164 | 87.25 | 14,311 | 17,058 | 70 | 1,200,310 | 142 | 102.92 | 14,636 | 2,889 | 7.1 | 251,840 |
|  | 180 | 8.62 | 4 | 18,719 | 80.72 | 1,510,890 | 166 | 116.80 | 19,435 | 3,404 | 98.31 | 334,681 |
| - | 186 | 114.00 | 21,183 | 19,747 | 93.51 | 1,846,578 | 175 | 136.00 | 23,740 | 3,817 | 112.16 | 128,064 |
| 1908 | 190 | 107.00 | 20,330 | 19,992 | 93.41 | 1,867,530 | 177 | 126.00 | 22,302 | 3,869 | 107.76 | 416,939 |
| 1909 | 192 | 110.00 | 21,120 | 20,640 | 95.64 | 1,974,052 | 179 | 127.00 | 22,733 | 4,053 | 107. | 437,082 |
| 1910 | 166 |  |  | 21,040 |  |  | 170 |  |  | 4,123 |  |  |
| $1910^{\text {** }}$ | 166 | 121 | 20,086 | 19,833 | 108.03 | 2,142,524 | 185 | 137.00 | 23,97 | 4,210 | 120. | 506,049 |
|  | 168 | 126.00 | 21,168 | 20,277 | 111.46 | 2,259,981 | 178 | 146.00 | 25,988 | 4,323 | 125.92 | 544,359 |
| 1912--- | 173 | 126.00 | 21,798 | 20,509 | $105.9 \pm$ | 2,172,694 | 182 | 144.00 | 26,208 | 4,362 | 120.5 | 525,637 |
| 13 | 176 | 128.00 | 22,528 | 20,567 | 110.77 | 2,278,222 | 180 | 148.00 | 27,528 | 4,386 | 124. | 545,245 |
| 191 | 180 | 139.00 | 25,020 | 20,962 | 109.32 | 2,291,6\%88 | 192 | 60.00 | 30,720 | 4,449 | 123. | 551,017 |
|  | 182 | 130.00 | 23,660 | 21,195 |  |  |  |  | 29,294 | 4,479 | 112 | 503,271 |
|  | 185 | 122.00 | 22,570 | 21,159 | 101.60 | 2,149,786 | 200 | 140.00 | 28,000 | 4,593 | 113.83 | 522,834 |
| 1917 | 185 | 125.00 | 23,125 | 21,210 | 102.89 | 2,182,307 | 203 | 150.00 | 30,750 | - 4,723 | 118. | 558,006 |
|  | 187 | 140.00 | 26,180 | 21,555 | 104.24 | 2,246,970 | 210 | 167.00 | 35,070 | 4,87 | 128.8 | 627,679 |
| 19 | 181 | 146.00 | 26,426 | 21,482 | 98.45 | 2,114,897 | 225 | 176.00 | 39,600 | 4,95 | 135.8 | 672,922 |
| 1920 | 171 | 156.00 | 26,676 | 19,766 | 96.51 | 1,907,646 | 257 | 192.0 | 49,344 | 5,42 | 148.4 | 805,495 |
| 1920 *** | 1 |  |  | 19,767 |  |  | 257 |  |  | 5,432 |  |  |
| 1921 | 166 | 125.00 | 20,750 | 19,208 | 84.31 | 1,619,423 | 260 | 156.00 | 33, | 5 | 116.69 | 68 |
| 1922 | 166 | 108.00 | 17,928 | 19,056 | 70.54 | 1,344,136 | 25 | 129.00 | 33,153 | 5,467 | 85 |  |
| 1923 | 166 | 108.00 | 17,928 | 18,853 | 69.75 | 1,314,95 | 260 | 128.00 | 33,280 | 5,506 | 85. | 472,735 |

ter; and it is by no means beyond belief that we may not soon be erecting monuments, as has come about elsewhere, in gratitude to that gobble-un that will surely git us ef we don't watch out (to quote Little Orphant Annie). But this result will be brought about only if we set to work promptly to master the lesson experience is teaching other states. They have not yet learned it thoroughly and we are only now being compelled to buck up against it ; and to this fact in some measure are due the strides we have made ahead of some of our southern competitors. But our hour is at hand, and we must look facts in the face.

Our livestock level is pitifully low. Only four states fall below us when the states are ranked according to their status in percent of a lightly stocked farm area. And when it comes to pure-bred livestock, only two states (South Carolina and Louisiana) stand below us in percent of farms reporting one or more pure-bred horses, 'dairy cows, beef cattle, sheep, or swine. Furthermore, in livestock values per farm in 1920, only Alabama is below us, and that by a single dollar, while South Carolina, next above us, has thirty-three dollars per farm more in livestock values than we. See tables in the University News Letter, Vol. VIII, Nos. 29 and 32, and Vol. IX, No. 1.

Moreover, looking in detail at the figures shown in Tables X to XII, it is plain that we have made relatively little progress in livestock in the fifty-seven years considered in this bulletin.

Horses and Mules. Horses and mules (Table X) make the best showing, because they are indispensable work animals. But while our horses were increasing 68 percent (from 99,000 in 1867 to 166,000 in 1923), the horses in the United States at large were increasing 249 percent (from $5,401,000$ in 1867 to $18,853,000$ in 1923). In mules we more than kept pace with the United States in percent of increase ; we have nearly eight times as many mules now as in 1867 ( 260,000 now, compared with 33,000 at the earlier date), whereas the United States at large has less than seven times as many now as in 1867 ( $5,506,000$ compared with 822,000).

The curves of trend in price for horses and for mules are very similar (charts 38 and 39). In both cases the North Carolina price is higher than the United States price, and in both cases there has been a greater increase in price in North Caro-



CHART 39.-MULES: FARM PRICE, N. C. AND U. S.

TABLE XI-CATTLE ON FARMS

| MILCH COWS |  |  |  |  |  |  | OTHER CATTLE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NORTH CAROLINA |  |  |  | UNITED STATES |  |  | $\begin{gathered} \text { NORTH } \\ \text { CAROLINA } \end{gathered}$ |  |  | $\begin{aligned} & \text { UNITED } \\ & \text { STATES } \end{aligned}$ |  |  |
| $\begin{gathered} \stackrel{\rightharpoonup}{\text { म. }} \\ \underset{\sim}{\text { A. }} \end{gathered}$ |  |  |  |  |  | 范 |  |  |  |  |  |  |
|  | 204 | 14.90 | 3,032 | 8,349 | 28.74 | 4 239,947 | 293 | 6.69 |  |  | 15. | 1 |
|  | 204 | 13.73 | 2,795 | 8,692 | 26.56 | - 230,817 | 287 | 6.74 | 1,935 | 11,942 | 15.06 | 179,888 |
| 1869 | 206 | 15.27 | 3,140 | 9,248 | 29.15 | - 269,610 | 281 | 8.19 | 2,305 | 12,185 | 18.73 | 228,183 |
| 1870 | 206 | 16.94 |  | 10,096 | 32.70 | O 330,175 | 296 | 9.19 | 2,716 | 15,388 | 18.87 | 290,401 |
| 1880* | 197 |  |  | 8,935 |  |  | 324 |  |  | 14,885 |  |  |
| 1 | 203 | 20.39 | 4,147 | 10,023 | 33.89 | 339,701 | 298 | 9.65 | 2,879 | 16,212 | 20.78 | 60 |
| 187 | 205 | 20.06 |  |  | 29.45 | 303,438 | 307 | 9.58 | 2,943 | 16,390 | 18.12 | 296,932 |
| 1873 | 201 | 15.15 | 3,048 | 10,576 | 26.72 | 2 282,559 | 316 | 8.74 | 2,767 | 16,414 | 18.06 | 296,448 |
| 187 | 199 | 14.09 | 2,806 | 10,705 | 25.63 | 274,326 | 316 | 8.53 | 2,699 | 16,218 | 17.55 | 284,706 |
| 1875 | 197 | 14.32 | 2,823 | 10,907 | 25.74 | 280,701 | 310 | 7.88 | 2,443 | 16,313 | 16.91 | 275,872 |
|  | 201 | 13.59 | 2,732 | 11,085 | 25.61 | 283 | 313 | 8.95 | 2,802 | 16,785 | 17.00 | 87 |
| 1877 | 203 | 14.14 | 2,871 | 11,261 | 25.47 | 286,778 | 316 | 9.85 | 3,116 | 17,956 | 15. |  |
| 878 | 230 | 15.05 | 3,461 | 11,300 | 25.74 | 4 290,898 | 420 | 9.30 | 3,906 | 19,223 | 16.72 | 321,346 |
| 1879 | 232 | 22.20 | 5,157 |  | 21.71 | 1 256,721 | 416 | 8.17 | 3,398 | 21,408 | 15.38 | 329,254 |
| 1880 | 230 | 12.60 | 2,898 | 12,027 | 23.27 | 279,899 | 416 | 8.31 | 3,455 |  | 16.10 | 341,761 |
| $80^{*}$ | 232 |  |  | 12,443 |  |  | 420 |  |  | 23,482 |  |  |
| 81 | 230 | 13.46 | 3,096 | 12,369 | 23.95 | 296,277 | 407 | 8.77 | 3,574 | 20,939 | 17.33 | 362,862 |
| 1882 | 230 | 14.03 | 3,224 |  | 25.89 | 326,489 | 430 | 10.25 |  | 23,280 | 19.89 | 463,070 |
| 1883 | 237 | 17.18 | 4,067 | 13,126 | 30.21 | 396,575 | 428 | 10.68 | 4,572 | 28,946 | 21. | 611,549 |
| 188 | 234 | 17.00 | 3,984 | 13,501 | 31.37 | 423,487 | 420 | 10.84 | 4,547 | 29,046 | 23.52 | 683,229 |
|  | 241 | 17.00 | 4,103 |  | 29.70 | 412,903 | 428 | 11.91 | 5,096 | 29,867 | 23.25 | 691,383 |
| 1886 | 239 | 16.65 | 3,979 | 14,235 | 27.40 | 389,986 | 424 | 10.24 |  |  | 21.17 |  |
| 1887 | 241 | 15.75 | 3,801 | 14,522 | 26.08 | 378,790 | 419 | 9.99 | 4,188 | 33,512 | 19.79 | 663,138 |
| 1888 | 244 | 16.00 | 3,900 | 14,856 | 24.65 | 366,252 | 419 | 10.99 | 4,607 | 34,378 | 17.79 | 611,751 |
| 1889 | 247 | 16.50 | 4,082 | 15,299 | 23.94 | 366,226 | 419 | 11.41 | 4,783 | 35,032 | 17.05 | 597,237 |
| 1890 | 272 | 16.04 | 4,365 |  | 22.14 | 353,152 | 398 | 10.47 | 4,170 | 36,849 | 15.21 | 560,625 |
| 1890 | 223 |  |  | 16,512 |  |  | 407 |  |  | 33,734 |  |  |
|  | 267 | 17.50 |  |  | 21.62 |  | 390 | 11.12 | 4,343 | 36,876 | 14.76 | 544,128 |
| 18 | 269 | 17.60 | 4,741 | 16,416 | 21.40 | 351,378 | 390 | 11.59 | 4,527 | 37,051 | 15.16 | 570,749 |
| 1893 | 272 | 16.50 | 4,489 | 16,424 | 21.75 | 357,300 | 383 | 11.14 | 4,262 | 35,054 | 15.24 | 547,882 |
| 189 | 275 | 14.99 | 4,119 | 16,487 | 21.77 | 358,999 | 386 | 11.15 | 4,308 | 36,608 | 14.60 | 536,790 |
| 18 | 275 | 14.66 | 4,028 | 16,505 | 21.97 | 362,602 | 379 | 9.58 | 3,629 | 34,364 | 14.06 | 482,999 |
| 1896 | 272 | 14.40 | 3,917 | 16,138 | 22.55 | 5 363,956 | 364 | 10.12 | 3,680 | 32,085 | 15.86 | 508,928 |
| 189 | 267 | 13.75 | 3,666 | 15,942 | 23.16 | 369,240 | 345 | 9.55 | 3,300 | 30,508 | 16.65 | 507,929 |
| 1898 | 259 | 14.70 | 3,802 | 15,841 | 27.45 | 434,814 | 321 | 9.92 | 3,188 | 29,264 | 20.92 | 612,297 |
| 1899 | 248 | 15.90 | 3,947 | 15,990 | 29.66 | 474,234 | 296 | 10.86 | 3,211 | 27,994 | 22.79 | 637,931 |
| 1900 | 243 | 18.20 | 4,428 | 16,292 | 31.60 | 514,812 | 275 | 12.31 | 3,384 |  | 24.97 | 689,486 |
|  | 2.33 |  |  | 17,136 |  | 514,812 | . 391 |  |  |  |  |  |
|  | 214 | 18.89 |  |  | 30.00 |  | 327 | 9.79 |  | 45,500 | 19.93 |  |
| 1902 | 206 | 18.74 | 3,852 | 16,697 | 29.23 | 488,130 | 327 | 9.59 | 3,141 | 44,728 | 18.76 | 839,126 |
| 1 | 201 | 19.81 | 3,991 | 17,105 | 30.21 | 516,712 | 308 | 9.84 | 3,029 | 44,659 | 18.45 | 824,055 |
| 190 | 197 | 22.36 | 4,415 | 17,420 | 29.21 | 508,841 | 299 | 10.74 | 3,207 | 43,629 | 16.32 | 712,178 |
|  | 193 | 20.90 | 4,044 | 17,572 | 27.44 | 482,272 | 30 | 10.37 | 3,127 | 43,669 | 15.15 | 661,571 |
|  | 259 | 27.10 | 7,026 | 19,794 | 29.44 | 582,789 | 437 | 10.98 | 4,803 |  | 15.85 | $746,172$ |
| 19 | 283 | 24.00 | 6,782 | 20,968 | 31.00 | 645,497 | 446 | 12.00 | 5,200 | 51,566 | 17.10 | 881,557 |
| 1908 | 294 | 24.00 | 7,056 | 21,194 | 30.67 | 650,057 | 450 | 12.00 | 5,400 | 50,073 | 16.89 | 845,938 |
| 1909 | 294 | 25.00 | 7,350 | 21,720 | 32.36 | 702,945 | 454 | 11.50 | 5,221 | 49,379 | 17.49 | 863,754 |
| 1910 ${ }^{\text {191* }}$ | 309 |  |  | 21,801 |  |  | 392 |  |  | 47,279 |  |  |
| 1910 ** | 309 | 25.50 | 7,880 | 20,625 | 35.29 | 727,802 | 39 | 12.50 | 4,900 | 41,17'8 | 19.07 | 785,261 |
|  | 312 | 28.00 | 8,7 | 20,823 | 39.97 | 832,209 | 358 | 13.40 | 5,199 | 39,679 | 20.54 | 815,184 |
| 1912 | 312 | 28.00 | 8,736 | 20,699 | 39.39 | - 815,414 | 380 | 12.60 | 4,788 | 37,260 | 21.20 | 790,064 |
| 1913 | 212 | 30.10 | 9,391 | 20,497 | 45.02 | 922,783 | 372 | 14.90 | 5,543 | 36,030 | 26.36 | 949,645 |
| 1914 | 309 | 35.10 | 10,846 | 20,737 | 53.94 | 1,118,487 | 36 | 17.30 | 6,314 | 35,855 | 31.13 | 1,116,333 |
| 1915 | 315 | 36.50 | 11,498 | 21,262 | 55.33 | 1,176,338 | 369 |  | 6,273 | 37,067 | 33.38 | 1,237,376 |
| 1916 | 321 | 34.00 | 10,914 | 22,108 | 53.92 | 1,191,955 | 375 | 16.80 | 6,300 | 39,812 | 33.53 | 1,334,928 |
| 1917 | 315 | 39.00 | 12,285 | 22,894 | 59.63 | 1,365,251 | 36 | 19.40 | 7,062 | 41,689 | 35.88 | 1,497,621 |
| 1918 | 309 | 51.00 | 15,759 | 23,310 | 70.54 | 1,644,231 | 375 | 24.80 | 9,300 | 44,112 | 40.88 | 1,803,482 |
| 1919 | 315 | 65.00 | 21,735 | 23,475 | 78.20 | 1,835,770 | 379 | 31.90 | 12,090 | 45,085 | 44.22 | 1,993,442 |
| 1920 | 354 | 78.00 | 27,612 | 23,722 | 85.86 | 2,036,750 | 291 | 32.00 | 9,312 | 43,998 | 43.21 | 1,875,043 |
| 1920** | 354 |  |  | 23,722 |  |  | 29 |  |  | 43,398 |  |  |
| 192 | 361 | 58.00 | 20,938 | 23,594 | 64.2 | 1,515,249, | 285 | 24.20 | 6,897 | 41,993 | 31.36 | 1,316,727 |
| 1922 | 365 | 42.00 | 15,330 | 24,082 | 50.98 | 1,227,702 | 274 | 17.30 | 4,740 | 41,550 | 23.80 | 988,760 |
| 1923 | 365 | 39.00 | 14,235 | 24,429 | 50.83 | 1,241,673\| | 274 | 17.10 | 4,685 | 41,923 | 25.67 | 1,076,254 |

[^4]*** Census, January 1.
 CHART 40.-MILCH COWS: FARM PRICE, N. C. AND U. S.


CHART 41.-OTHER CATTLE: FARM PRICE, N. C. AND U. S.
lina than in the United States, which has widened the gap between our price and the price for the United States as a whole. Both curves are declining since the high prices of the war period, and they are at present below their pre-war level. Automobiles and farm motors are no doubt exercising a greater influence on prices for these animals in the country at large than in North Carolina; hence our higher percentage of gain in farm price.

Cattle. Our increase in number of dairy cattle in 1923 over 1867 (Table XI) was only 79 percent ( 365,000 compared with 204,000), while the similar increase in the United States at large was 193 percent ( $24,429,000$ compared with $8,349,000$ ). Our other cattle actually dwindled in number-they are six percent fewer in 1923 than they were in 1867 (274,000 compared with 293,000) ; whereas in the United States at large the cattle other than dairy cattle are over three and a half times as many in 1923 as in 1867 ( $41,923,000$ companed with (11,731,000). These figures are significant and should give us pause.

Furthermore, our farm prices for both milk cows and other cattle (charts 40 and 41) are much below the United States averages; and, though we have in each case made a greater percentage gain in price per head than the United States as a whole has made, our ten-year average price (Jan. 1) 1914-23 was only 77 percent of the United States ten-year average price for milk cows, and for other cattle only 63 percent of the United States average for the same ten years.

Sheep. As for sheep (Table XII), we seem to be abandoning them altogether. They are a dwindling quantity in both North Carolina and the United States, but our decrease, comparing 1923 with 1867 , was 76 percent ( 81,000 compared with 339,000 ), whereas the decrease in the United States as a whole was only six percent ( $37,209,000$ compared with $39,385,000$ ).

Notwithstanding the fact that we have made a greater percentage gain in farm price for sheep than the country at large, our ten-year average price (Jan. 1) 1914-23 was still only 76 percent of the United States average farm price for sheep for the same ten years. Evidently the sheep industry is not thriving with us.

Szuine. Conditions as regards swine are somewhat better. Our 1923 number (Table XII) shows an increase of nine percent

TABLE XII-SHEEP AND SWINE ON FARMS

| SHEEP |  |  |  |  |  |  | SWINE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NORTH CAROLINA |  |  |  | UNITED STATES |  |  | $\begin{aligned} & \text { NORTH } \\ & \text { CAROLINA } \end{aligned}$ |  |  | $\begin{aligned} & \text { UNITED } \\ & \text { STATES } \end{aligned}$ |  |  |
| $\begin{aligned} & \text { F } \\ & \text { 를 } \\ & \stackrel{y}{c} \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1867 | 339 | 1.32 | 447 | 39,385 | 2.50 | 98,644 | 1,161 | 3.27 | 3,797 | 24,694 | 4.03 |  |
| 1868 | 326 | 1.20 | 390 | 35,992 | 1.82 | 71,053 | 975 | 2.49 | 2,432 | 24,317 |  |  |
| 1869 | 296 | 1.26 | 374 | 37,724 | 1.64 | 62,037 | 858 | 3.19 |  | 23,316 | 4.65 | 108,431 |
| 1870 | 325 | 1.37 | 445 | 40,853 | 1.96 | 79,876 | 850 | 3.94 | 3,350 | 26,751 | 5.80 | 155,108 |
| 18\% ${ }^{*}$-- | 463 |  |  | 28,4\%8 |  | 70,87 | 1,075 |  | 3,200 | -25,135 | 5.80 | 155,108 |
| 1871 | 315 | 1.47 | 464 | 31,851 | 2.14 | 68,310 | 842 | 3.75 | 3,155 | 5-29,458 | 5.61 | 165,312 |
| 1872 | 296 | 1.44 | 426 | 31,679 | 2.61 | 82,768 | 875 | 2.75 | 2,406 | 21,796 | 4.01 | 127,453 |
| 1873 | 293 | 1.43 | 421 | 33,002 | 2.71 | 89,427 | S49 | 2.75 | 2,330 | 32,632 | 3.67 | 119,632 |
| 187 | 279 | 1.41 | 392 | 33,938 | 2.43 | 82,353 | 823 | 2.60 | 2,141 | 130,861 | 3.98 | 122,695 |
| 18 | 276 | 1.41 | 390 | 33,784 | 2.55 | 86,278 | 807 | 2.96 | 2.391 | 128,062 | 4.80 | 134,581 |
| 1876 | 284 | 1.39 | 394 | 35,935 | 2.37 | 85,121 | 758 | 3.52 | 2,670 | 25,727 | 6.00 | 154,251 |
| 187 | 281 | 1.43 | 401 | 35,804 | 2.13 | 76,302 | 736 | 3.89 | 2,863 | 28,077 | 5.66 | 158,873 |
| 1878 | 490 | 1.50 | 734 | 35,740 | 2.21 | 78,598 | 1,180 | 3.65 | 4,304 | 32,262 | 4.85 | 156,577 |
| 1879 | 425 | 1.28 | 543 | 35,124 | 2.07 | 78,965 | 1,263 | 2.96 | 3,734 | 34,766 | 3.18 | 110,508 |
| 1850 | 425 | 1.45 | 616 | 40,766 | 2.21 | 90,231 | 1,263 | 3.15 | 3,977 | 34,034 | 4.28 | 145, 782 |
| 1880 | 462 |  |  | 42,192 |  | 00,231 | 1,45.4 |  |  | -19,773 |  | 140,72 |
| 1881 | 386 | 1.35 | 521 | 43,570 | 2.39 | 104,071 | 1,237 | 3.20 | 3,959 | 36,248 | 4.70 | 170,535 |
| 1882 | 471 | 1.30 | 612 | 45, 016 | 2.37 | 106,596 | 1,381 | 4.12 | 5,689 | 44,122 | 5.97 | 263,543 |
| 1883 | 466. | 1.39 | 648 | 49,237 | 2.53 | 124,366 | 1,312 | 4.15 | 5,444 | 43,270 | 6.75 | 291,951 |
| 1884 | 452 | 1.38 | 624 | 50,627 | 2.37 | 119,903 | 1,364 | 3.91 | 5,334 | 44,201 | 5.57 | 246,301 |
| 1885 | 488 | 1.37 | 669 | 50,360 | 2.14 | 107,961 | 1,433 | 4.04 | 5,787 | 45,143 | 5.02 | 226,402 |
| 1886 | 469 | 1.28 | 600 | 48,322 | 1.91 | 92,444 | 1,347 | 3.21 | 4,357 | 46,092 | 4.26 | 196,570 |
| 1887 | 450 | 1.28 | 576 | 44,759 | 2.01 | 89,873 | 1,279 | 3.35 | 4,287 | 44,613 | 4.48 | 200,043 |
| 1888 | 428 | 1.36 | 581 | 43,545 | 2.05 | 89,2<0 | 1,266 | 3.53 | 4,464 | 44,347 | 4.98 | 220,811 |
| 1889 | 419 | 1.37 | 576 | 42,599 | 2.13 | 90,640 | 1,279 | 3.76 | 4,810 | 50,302 | 5.79 | 291,307 |
| 1890 | 415 | 1.51 | 625 | 44,336 | 2.27 | 100,660 | 1,292 | 3.38 | 4,368 | 51,603 | 4.72 | 243,418 |
| 1890* | 402 |  |  | 40,8\%6 |  | 100, | 1,251 |  |  | 57,427 |  | 240,418 |
| 1891 | 398 | 1.70 | 679 | 43,431 | 2.50 | 108,397 | 1,292 | 3.36 | 4,343 | 50,625 | 4.15 | 210,194 |
| 1892 | 390 | 1.82 | 710 | 44,938 | 2.58 | 116,121 | 1,253 | 3.70 | 4,640 | 52,398 | 4.60 | 241,031 |
| 1893 | 396 | 1.62 |  | 47,274 | 2.66 | 125,909 | 1,259 | 4.05 | 5,094 | 46,095 | 6.41 | 295,426 |
| 1891 | 376 | 1.49 | 559 | 45,048 | 1.98 | 89,186 | 1,335 | 3.99 | 5,329 | 45,206 | 5.98 | 270,385 |
| 18 | 357 | 1.34 | 480 | 42,294 | 1.58 | 66,686 | 1,442 | 3.96 | 5,712 | 44,166 | 4.97 | 219,501 |
| 1896 | 343 | 1.39 |  | 38,290 | 1.70 | 65,168 | 1,427 | 3.92 | 5,592 | 42,843 | 4.35 | 186,530 |
| 1897 | 319 | 1.39 |  | 36,819 | 1.82 | 67,021 | 1,456 | 3.11 | 4,524 | 40,600 | 4.10 | 166,273 |
| 1898 | 300 | 1.47 |  | 37,657 | 2.46 | 92,721 | 1,427 | 3.03 | 4,319 | 39,760 | 4.39 | 174,351 |
| 1899 | 261 | 1.52 |  | 39,114 | 2.75 | 107,698 | 1,370 | 3.29 | 4,504 | 38,652 | 4.40 | 170,110 |
| 1900 | 235 | 1.62 | 380 | 41,883 | 2.93 | 122,666 | 1,329 | 3.56 | 4,725 | 37,079 | 5.00 | 185,472 |
| $1900^{*}$ - | +302 |  | ----- | 61,504 |  |  | 1,300 |  |  | 192,870 |  |  |
| 01 | 279 | 1.73 |  | 59,757 | 2.98 | 178,072 | 1,302 | 3.66 | 4,770 | 56,982 | 6.20 | 353,012 |
| 1902 | 245 | 1.69 |  | 62,039 | 2.65 | 164,446 | 1,094 | 3.95 | 4,317 | 48,699 | 7.03 | 342,121 |
| 1903 | 2.21 | 1.79 |  | 63,965 | 2.63 | 168,316 | 1.017 | 5.39 | 5.482 | 46,923 | 7.78 | 364,974 |
| 1904 | 203 | 1.98 |  | 51,630 | 2.59 | 133,530 | 1,048 | 4.84 | 5.071 | 47,009 | 6.15 | 259,225 |
| 190 | 209 | 1.99 |  | 45,170 | 2.82 | 127,332 | 1,058 | 4.85 | 5,132 | 47,321 | 5.99 | 283,255 |
| 1906 | 220 | 2.69 |  | 50,632 | 3.54 | 179,056 | 1,153 | 4.80 | 5,536 | 52,103 | 6.18 | 321,803 |
| 1907 | 224 | 2.44 |  | 53,240 | 3.84 | 204,210 | 1,292 | 5.30 | 6,846 | 54,794 | 7.62 | 417,791 |
| 1908 | 220 | 2.62 |  | 54,631 | 3.88 | 211,736 | 1,357 | 5.60 | 7.599 | 56,084 | 6.05 | 339,030 |
| 1909 | 222 | 2.40 | 533 | 56,084 | 3.43 | 192,632 | 1,398 | 6.30 | 8,807 | 54,147 | 6.55 | 354,794 |
| 1910 | 214 |  | --- | 57,216 |  |  | 1,228 |  |  | 47,782 |  |  |
| $1910{ }^{* *}$ - | 214 | 2.60 | 556 | 52,448 | 4.12 | 216,030 | 1,228 | 7.20 | 8,842 | 58,186 | 9.17 | 533,309 |
| 1911. | 203 | 2.98 | 605 | 53,633 | 3.91 | 209,535 | 1,351 | 7.60 | 10,26S | 65,620 | 9.37 | 615,170 |
| 1912 | 193 | 2.80 | 540 | 52,362 | 3.46 | 181,170 | 1,405 | 7.40 | 10,397. | 65,410 | 8.00 | 523,328 |
| 1913 | 181 | 3.10 | 561 | 51,482 | 3.94 | 202,779 | 1,335 | 7.70 | 10,280 | 61,178 | 9.56 | 603,109 |
| 1914 | 177 | 3.20 | 566 | 49,719 | 4.02 | 200,045 | 1,362 | 9.00 | 12,25S | 58,933 | 10.40 | 612,951 |
| 191 | 177 | 3.30 | 584 | 49,956 | 4.50 | 224,687 | 1,525 | 8.20 | 12,505 | 64,618 | 9.87 | 637,479 |
| 1916 | 155 | 3.20 | 496 | 48,625 | 5.17 | 251,594 | 1,550 | 7.80 | 12,090 | 67,766 | 8.40 | 569,573 |
| 1917 | 140 | 3.90 | $5 \pm 6$ | 47,616 | 7.13 | 339,529 | 1,450 | 9.70 | 14,065 | 67,503 | 11.75 | 792,898 |
| 1918 | 137 | 6.60 | 904 | 48,603 | 11.82 | 574,575 | 1,400 | 17.10 | 23,940 | 70,978 | 19.54 | 1,387,261 |
| 1919--- | 135 | 8.70 | 1,201 | 48,866 | 11.63 | 568,265 | 1,546 | 21.00 | 32,466 | 74,5S4 | 22.02 | 1,642,598 |
| 1920--- | 91 |  | ----3 | 39,025 | 10.47 | 408,586 | 1,2\%1 |  | ----- | 59,344 | 19.07 | 1,131,674 |
| 1990*** | 91 | 9.60 | 874 | 35,034 |  | , | 1,2\%1 | 20.00 | 25,420 | 59,346 | ----- |  |
| 1921 | 89 | 6.60 | 587 | 37,452 | 6.30 | 235,855 | 1,246 | 15.70 | 19,562 | 56,097 | 12.97 | 727,380 |
| 1922 | 84 | 4.90 | 412 | 36,327 | 4.80 | 174,545 | 1,258 | 12.00 | 15,096 | 57,834 | 10.07 | 582,448 |
| 1923 | 81 | 5.60 | 454 | 37,209 | 7.50 | 278,939 | 1,271 | 13.30 | 16,904 | 63,424 | 11.46 | 726,699 |

* Census, June 1. ** Census, April $15 . \quad$ *** Census, January 1.
$\dagger$ Includes spring lambs (N. C. 93,000 , U. S. $21,668,000$ ). In previous censuses instructions did not mention them, and it is doubtful to what extent they were reported as sheep.


CHART 42.-SHEEP: FARM PRICE, N. C. AND U. S.

over the 1867 figures ( $1,271,000$ compared with $1,161,000$ ), while in the United States as a whole there has been an increase of 157 percent ( $63,424,000$ compared with $24,694,000$ ).

Our farm price per head of swine (chart 43) has been uniformly below the United States figure, but our gain in price, comparing the decades 1913-22 and 1866-75, was 329 percent, while in the United States as a whole the gain in price was only 196 percent. This brings the North Carolina price very near to the United States level-i. e., the North Carolina ten-year average farm price for swine (Jan. 1) 1914-23 was 98.7 percent of the United States average for the same ten years ( $\$ 13.38$ compared with \$13.56). This, at any rate, is encouraging.

## III. Food Production

1. Food production as compared with population. The relation of food production to population in North Carolina and in the United States cannot be adequately discussed without closer study than has yet been given this subject. However, comparing production and population in the several census years included in the fifty-seven years here considered, it may be said

TABLE XIII-FOOD CROPS AND POPULATION IN N. C. CENSUS YEARS 1870-1920

| Year | Population | CORN |  | WHEAT |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production in Preceding Year Bus. | Per In. habitant Bus. | Production in Preceding Year Bus. | Per In. habitant Bus. |
| 1870 | 1,071,361 | 18,454,000 | 17.2 | 2,560,000 | 2.7 |
| 1880 | 1,399,750 | 28,020,000 | 20.0 | 3,397,000 | 2.4 |
| 1890 | 1,617,949 | 25,784,000 | 15.9 | 4,292,000 | 2.7 |
| 1900. | 1,893,810 | 34,819,000 | 18.4 | 4,342,000 | 2.3 |
| 1910 | 2,206,287 | 34,064,000 | 15.4 | 3,827,000 | 1.7 |
| 1920 | 2,559,123 | 40,998,000 | 16.0 | 4,745,000 | 1.9 |
| Year | Population | OATS |  | POTOTOES (All) |  |
|  |  | Production in Preceding Year Bus. | Per In. habitant Bus. | Production in Preceding Year Bus. | Per Inhabitant Bus. |
| 1870 | 1,071,361 | 3,220,000 | 3.0 | 3,811,000 | 3.6 |
| 1880 | 1,399,750 | 3,838,000 | 2.7 | 5,299,000 | 3.8 |
| 1890 | 1,617,949 | 4,513,000 | 2.7 | 6,864,000 | 4.2 |
| 1900. | 1,393,810 | 2,455,000 | 1.3 | 7,418,000 | 3.9 |
| 1910 | 2,206,287 | 2,783,000 | 1.3 | 10,865,000 | 4.9 |
| 1920 | 2,559,123 | 1,671,000 | . 7 | 12,163,000 | 4.8 |



CHART 44.-PRODUCTION PER INHABITANT OF IMPORTANT FOOD CROPS IN NORTH CAROLINA FOR CENSUS YEARS 1870-1920.
that North Carolina seems to be losing ground in per capita production of corn, wheat, and oats, while gaining in per capita production of potatoes and sweet potatoes. In the United States as a whole, on the contrary, there would seem to be an increasing per capita production of wheat and oats, while the production of corn per capita in census years has varied so much as to obscure the trend; and no plainly marked trend is observable in per capita production of potatoes and sweet potatoes. The United States, of course, is a surplus-producing wheat country, but in North Carolina it may be noted that per capita production of wheat is far below the average per capita consumption of wheat in this state-even though (because of our use of cornmeal) our estimated requirements of wheat per person is small as compared with the requirements in many other states.

TABLE XIV-FOOD ANIMALS AND POPULATION IN N. C. CENSUS YEARS 1870-1920

| Year | Population | MILCH COWS |  | OTHER CATTLE |  | SWINE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total <br> Number | $\begin{aligned} & \text { Per } \\ & \text { Inhab- } \\ & \text { itant } \end{aligned}$ | Total <br> Number | Per Inhab- itant | Total Number | Per <br> Inhab- <br> itant |
| 1870-- | 1,071,361 | 197,000 | 0.18 | 324,000 | 0.30 | 1,075,000 | 1.00 |
| 1880 | 1,399,750 | 232,000 | . 17 | 425,000 | . 30 | 1,454,000 | 1.04 |
| 1890 | 1,617,949 | 223,000 | . 14 | 407,000 | . 25 | 1,251,000 | . 77 |
| 1900 | 1,893,81.0 | 233,000 | . 12 | 391,000 | . 21 | 1,300,000 | . 69 |
| 1910 | 2,206,287 | : 309,000 | . 14 | 392,000 | . 18 | 1,228,000 | . 56 |
| 1920 | 2,559,123 | 354,000 | . 14 | 291,000 | . 11 | 1,271,000 | . 56 |



Similar and even more marked diminution is found in food animals as compared with population in North Carolina. These facts are exhibited in Tables XIII and XIV and in charts 44 and 45.

Careful investigation of this whole subject would be of interest in connection with the effort to establish ourselves more securely on a self-feeding basis.
2. General considerations. In considering our standing in livestock, we would do well to take a look at some of the states whose livestock levels are high. (See University News Letter, Vol. VIII, No. 29.) Iowa stands first in this respect, and Iowa also stands first in farm wealth produced per farm worker and per country dweller and in the surplus of food and feed supplies produced (University New's Letter, Voi. VIII, Nos. 25, 38, and 47). Other states having high livestock levels stand similarly much higher than North Carolina in all these respects. These are all matters in which we rank comparatively low, and in which we can beyond question improve our status by paying to our farm livestock situation the attention it urgently demands. We need to give this matter such serious thought as will lead us to cease to concentrate entirely upon cash crops. These, though they bring high per-acre crop values, leave us with farm wealth amounting in the latest census year to some $\$ 684$ per country dweller, as compared with $\$ 8,113$ in Iowa and $\$ 1,836$ in the United States at large.

Improvement in our tenancy situation will bring improvement in our livestock situation, and vice versa. This is a fact brought out plainly in the findings of the North Carolina Club at the University in its recent exploration of the whole subject of tenancy. These findings will repay study; they have been published in the Club Year-Book for 1921-22, on Farm and Home Ownership.

It cannot be denied that there has been vast prosperity for the few under our prevailing farm system. But what of the many? Have they prospered in due proportion?

Coöperative marketing is calculated to play a big part in preserving for the many some abiding financial fruits of their labor. But coöperative marketing of cash crops alone cannot establish a high standard of living in our country regions. Food and feed crops, home-raised bread and meat, are essentials if we are
to retain any considerable proportion of the weaith we produce. And these are generally characteristic of a home-owning civilization, towards which we must direct our efforts. The recent appointment of a commission to study the matter of state-aid to assist farmers in owning their own homes is a step in the right direction. Such study must not be allowed to languish. It must be pushed forward until logical conclusions are reached, and then acted upon with the promptitude and firmness that have characterized much of our state legislation in recent years.

But the main portion of our necessary readjustments must come from the farmers themselves. Their prosperity in the main is in their own hands if they will read aright the lessons taught by experience in this state and the South generally. The state institutions of learning are eager to help them with these lessons, which are not easy to digest without the aid of trained minds. But surely we may end on a note of optimism, since, beyond question, the opportunity for training is more and more available and is more and more welcomed and embraced by our rising generation.

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[^0]:    * Revisions based on 1919 census.
    ** Subject to revision December, 1923.

[^1]:    * Revisions based on 1919 census. ** Subject to revision December, 1923.

[^2]:    * Revisions based on 1919 census.

[^3]:    * From 1899 to 1921 production figures are census returns from ginners.
    ** Subject to revision.

[^4]:    * Census, June 1.

