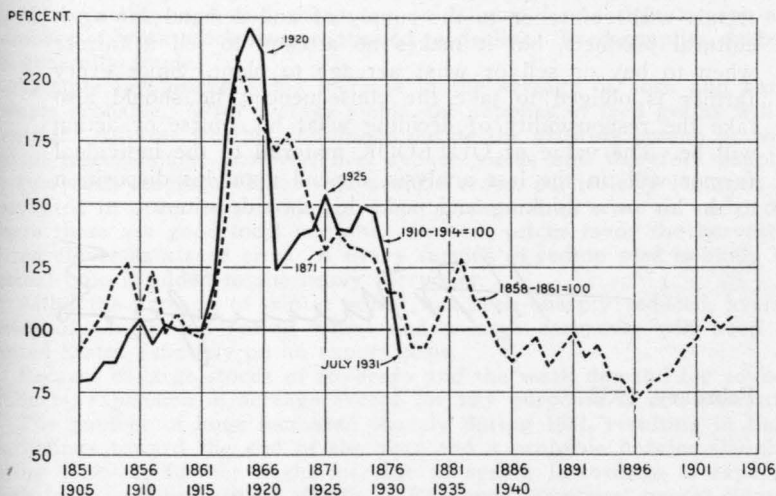


Agricultural Outlook for Illinois

1932

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INDEX OF WHOLESALE PRICES OF FARM PRODUCTS FROM
1851 TO 1904 AND FROM 1905 TO DATE

The decline since 1920 is about the same as that which occurred following the Civil War. Prices have fallen relatively lower since the World War than the point from which the temporary advance began after the Civil War—compare July, 1931, with 1877. (*Bureau of Agricultural Economics, U.S.D.A.*)

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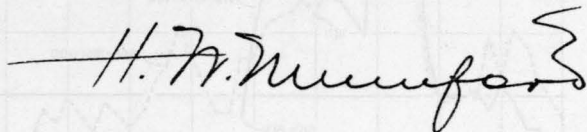
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AIM OF ILLINOIS OUTLOOK

THIS OUTLOOK aims to furnish Illinois farmers with information that will help them to plan their farm enterprises in 1932. It assumes that planning has a definite place in the farmers' program. It looks backward as well as forward because the wise planner builds on the basis of experience.

Not all OUTLOOK materials should be or can be used by all farmers in the same way. Peculiarities of soil and other physical conditions, as well as the individuality of the farmer, his ability, training, industry, and judgment, are all factors to be taken into account. This Outlook therefore gives pertinent facts bearing on the agricultural situation and points out trends with reference to the supply of and demand for agricultural products, but it makes no attempt to tell a farmer when to buy or sell or what acreage to plant. Since every farmer is obliged to take the consequences, he should also take the responsibility of deciding what his course of action will be. The value of OUTLOOK material to the individual farmer will, in the last analysis, depend upon his disposition to do his own thinking and make his own decisions.



February, 1932

Further copies of this OUTLOOK may be obtained by addressing the College of Agriculture, University of Illinois, Urbana.

630.7
Il 6c The Outlook in Brief

THE AGRICULTURAL OUTLOOK for 1932 depends mainly upon the general business situation not only in this country but also abroad. The depressed state of business has created the present weak demand for farm products, which, in spite of generally normal supplies, has carried farm prices to the lowest levels in a generation.

The readjustments which are being made, both by industry and by agriculture, will gradually restore a normal volume of business activity. This will eventually strengthen the demand for farm products. It is unlikely, however, that prices in the next few years will recover to an average as high as that of 1921-1929.

Foreign demand for agricultural products may be expected to continue weak thru 1932, because of large foreign agricultural production, low purchasing power in foreign countries, and increasing trade restrictions.

More cattle, hogs, and sheep are on Illinois farms than a year ago. Numbers of work stock have continued to decline. Feed supplies on hand are generally ample.

Despite low prices, some increase in the acreage of corn and barley appears probable. With average yields, the supplies of feed grains will be plentiful. Adverse weather conditions during the growing season or widespread insect injury, however, may reduce yields and therefore supplies.

Increased seedings of hay and pasture crops, particularly legumes, are warranted in order to provide for farm needs and to serve as cash crops where there are good local markets. Present prices favor the harvesting of red clover as a seed crop. A heavy surplus of redtop seed is likely if a normal crop is added to the heavy carryover.

Altho the acreage of winter wheat has been sharply reduced, average yields of winter and spring wheat and a large carryover will keep the United States definitely on an export basis.

Because of large stocks of soybeans and the weak demand for soybean products, expansion in acreage except for hay purposes is not warranted.

The number of hogs increased sharply during 1931, resulting in heavy marketings toward the end of the year and a probable heavier slaughter during 1932. A further slight increase in spring farrowings is expected. With large supplies still available in European countries, export demand is likely to continue weak during much of the coming year.

The number of sheep is the largest on record, having expanded 49 percent since 1922. The large number of lambs and low prices indicate large market receipts. A decrease in size of breeding flocks during the coming year seems probable.

A further increase in number of dairy cows in 1931 and the present low price of feeds point to continued expansion in milk production. The increase in number of dairy heifers being kept for milk cows has been checked. Altho storage stocks of dairy products are low, low dairy price-levels seem likely to prevail because of the volume of current production and the decrease in demand.

Low egg prices appear likely during the first half of 1932 in view of heavy storage holdings of eggs and good current production, but if heavy marketings of hens should occur during the early months of 1932, prices of both eggs and fowl will likely improve in the latter half of the year.

With apple production on an upward trend in Illinois, increase in plantings is justified only on favored sites and where local outlets are available. Production of peaches appears to have passed the peak.

Farm wages declined during 1931 to a point below the pre-war level and will doubtless continue low thru 1932. Prices of building materials and farm machinery have declined only slightly as compared with prices of farm products. Because of low cash receipts in 1931 and because of limited credit conditions, there will be need to continue to restrict cash outlays in 1932. Now is the time to emphasize a basic long-time program which will provide for balanced production and low-cost operation.

The statements in this Outlook are based largely on data prepared by the U. S. Department of Agriculture in Cooperation with 31 state colleges of agriculture and the Federal Farm Board. A limited number of the more detailed national reports are available and will be furnished upon request.

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Demand as used in this Outlook refers to the quantity of a product which will be purchased at a *given price*. Demand should not be confused with consumption, which is the amount used.

Agricultural Outlook for Illinois—1932

GENERAL AGRICULTURAL SITUATION

THE GENERAL PRICE-LEVEL in 1931 continued to fall, the total decline in the past two years amounting to about one-third of the level prevailing in the winter of 1929. In December, 1931, the index stood at 97 percent of the pre-war years 1910-1914. As is usual in periods of falling prices, prices of farm products have declined more than those of nonagricultural products. On January 15, 1932, the index for farm products for the country as a whole stood at 63 percent of the 1910-1914 price-level. Thus the purchasing power of farm products has been drastically reduced.

At the end of 1931 the wholesale price index of all commodities was 15 percent lower than at the beginning of the year, most of the decline coming during the first half of the year, tho in the last two months the tendency to decline was resumed. Prices of nonagricultural products declined 10 percent; prices of farm products in wholesale markets declined 22 percent.

Some Illinois farm products have declined much more than others. The prices of beef cattle and horses, for example, over the last six months of 1931 were 75 percent of the average for the same months in 1921-1929, while the price of chickens was 72 percent, of hogs 56 percent, of wool 40 percent, and of wheat 34 percent of the 1921-1929 average.

Considering what has happened following previous periods of wartime inflation, the long-time trend of the general price-level is likely to continue downward, broken by periods of recovery and decline, tho there is always the possibility that such a downward trend may be reversed by changes which cannot be predicted, such as credit inflation during a war or some change in national monetary policy. During the temporary upward reactions in such declines history shows that the prices of farm products improve more than do those of nonagricultural products; hence the buying power of farm products is temporarily strengthened.

So long as the trend in the general price-level is downward, the position of farm products will be unfavorable because prices of nonagricultural products do not decline so rapidly as those of farm products. However, the extremely unfavorable relationship which has developed between prices of farm products and of farm costs at the end of 1931 cannot continue indefinitely, for the reduced buying power of farmers will force further reductions in prices of goods and services that farmers purchase.

A decline in prices like that of 1929-1931 creates so many stresses and maladjustments in the economic structure that the resulting business de-

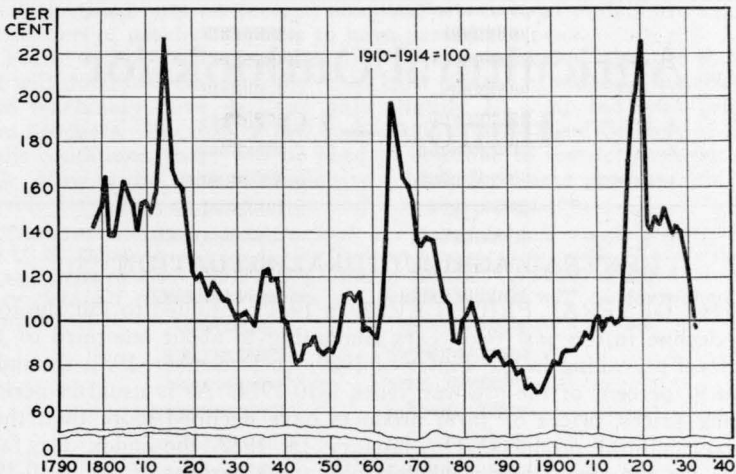


FIG. 1.—LONG-TIME TREND IN WHOLESALE PRICES IN THE UNITED STATES

In the long-time trend in the price-level in the United States three war-time peaks stand out, followed by periods of rapid decline. Between these peaks occurred long periods of falling prices, followed by shorter periods of rising prices. The decline in the past two years has carried prices back to the pre-war level and prices of many farm products far below that level.

pression cannot be of short duration. To bring about the adjustments and clear up the maladjustments so that business can proceed in normal volume takes time. It is possible, but not likely, that the process will have advanced sufficiently far toward completion during 1932 so that marked improvement in business activity and prices will take place.

With the present outlook for prices of Illinois farm products, no marked shifting from one type of production to another can be recommended. The man who has established a good system of farming has no reason to make radical changes. The situation calls rather for such gradual shifts as will permit economical production and the bringing of production into better adjustment with the changes suggested by economic conditions. On many farms there are opportunities for considerably increasing the income without any material increase in expenses, as well as possibilities for reducing cash outlays.

On the side of demand, it is becoming increasingly evident that the United States cannot export large volumes of food products to advantage (see section on Foreign Demand). If this is so, production will have to be adjusted largely to a domestic basis eventually, and the forward-looking farmer will anticipate needed changes rather than be forced into them by the pressure of low prices.

Illinois Farm Conditions in 1931. Earnings on Illinois farms in 1931 averaged lower than in 1930 and very much lower than in 1929 and 1928. A heavy mark-down occurred in inventory values of crops and livestock for both 1930 and 1931. Survey records taken on 113 McLean county

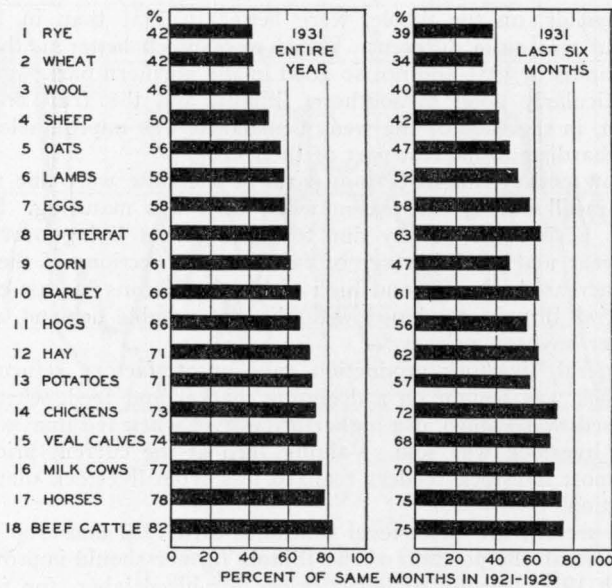


FIG. 2.—AVERAGE FARM PRICES OF ILLINOIS FARM PRODUCTS FOR THE YEAR 1931 AND FOR THE LAST SIX MONTHS OF 1931 COMPARED WITH THOSE FOR 1921-1929

Prices of all major Illinois farm products except eggs and butterfat averaged lower for the last six months of 1931 than for the entire year. The reduction in the price of chickens was very small.

farms indicate that the average farm in that area in 1931 lacked \$489 of having enough income to cover cash expenses and depreciation on equipment and pay for family labor, including that of the operator, at hired man's rates. In other words, the income from these farms lacked about \$2.25 an acre of paying any return on the investment. Incomes were low because of the drastic cut in inventories and because of extremely low prices received for farm products.

The year 1931 being exceptionally favorable for farm work, more than a usual amount of plowing was done before the normal time of spring grain seeding. This enabled farmers to make better use of their horses and so cut down their cash expenditures both for mechanical power and for extra labor. Operating costs were lower than for previous years because more work was done with family labor and because farm wages were much lower. Many corn huskers received 2 cents a bushel and their board, as compared with 5 and 6 cents in previous years. Fewer mechanical pickers were used because of the low price for labor, because the early husking season was dry, and because the corn was badly down in some areas. Since many cash expenditures must be made early in the year or are contracted for at that time, farmers did not get, in 1931, the full benefit of reductions in costs that had taken place by the end of the year.

Crop yields, on the whole, were better in 1931 than in 1930, altho distribution was quite different. Yields were much better in the southern part of Illinois in 1931 and not so good in the northern part. Wheat yields were particularly good in southern Illinois, and the fruit crop was so heavy that, in the face of the weak demand, it was unprofitable for many of the orchardists to harvest part of their crop.

The low corn yields in certain parts of the state were due to a shortage of rainfall during the season when corn was maturing. In general, there was a shortage of hay due to seedings not living over from the previous year and to a shortage of rain in some sections of the state.

The increased acreage and high yield of soybeans in east-central and south-central Illinois, combined with the unfavorable demand, resulted in much lower soybean prices.

In general, livestock production gave unsatisfactory returns in 1931. Feeder stock was bought on a declining market and feed, whether raised or purchased, was valued at a higher price-level when fed than was realized when the livestock was sold. Valuing feed at the current price when it was fed, most livestock feeders realized less from livestock than the costs of production.

If the present low price-level continues thru 1932 and crop production is fairly normal, the position of the Illinois farmer should improve as compared with 1931, because of lower prices for hired labor, for feeder livestock, for feeds, and for other supplies. Also the marked decline in inventories of feed and livestock which occurred in 1931 will not be repeated in 1932. Present low livestock prices afford an exceptional opportunity for farmers to acquire good foundation breeding stock to replace inferior animals.

Domestic Demand Affecting Illinois Farm Products. The demand for farm products in this country has fallen to an unusually low level. There was some improvement in the first few months of 1931, after which there was a continuous decline owing: (1) to the disturbing influence of the further decline in the general price-level; (2) to the decrease in industrial activity, and resulting decrease in employment and earnings; (3) to the severe liquidation in the security market which caused losses to many people, made financing difficult, and weakened public confidence; and (4) to a high rate of bank failures, which tied up the cash of many people and further weakened confidence.

The influence of the decline in the general price-level is of dominant importance, having a very disturbing influence on the economic structure. As an adjustment to lower prices and restricted markets, manufacturers have curtailed activities.

Industrial activity in the United States, which at the beginning of 1931 was about 82 percent of the 1923-1925 average, advanced to 90 percent in April and declined to 71 percent in December. The decline in basic industries has been even more severe than the average decline of all industry, as evidenced by the fact that production of iron and steel, automobiles, building materials, nonferrous metals, etc., declined in 1929 from an average of about 135 percent of the 1923-1925 base to about 60 percent in December, 1931.

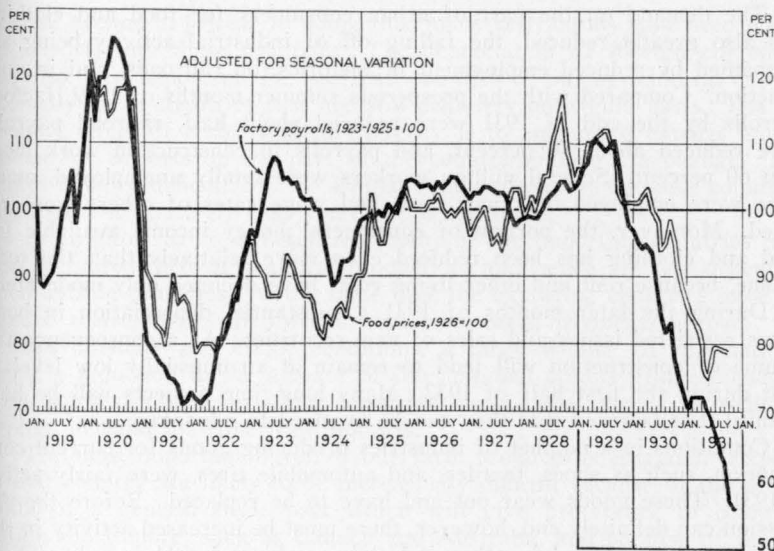


FIG. 3.—INDEXES OF WHOLESALE FOOD PRICES (MEATS AND DAIRY PRODUCTS) AND PAYROLLS

Wholesale prices of food products are closely related to the purchasing power of consumers as represented by payrolls of factory workers. As the purchasing power of a group declines, either the quantities purchased or the prices paid must be reduced. Much of this adjustment in food products generally takes place in prices. (*Bureau of Agricultural Economics, U. S. D. A.*)



FIG. 4.—INDEXES OF WHOLESALE PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES

The decline in wholesale prices in countries taking most of the United States exports has followed the same course as in this country. This decline has reduced the purchasing power of those countries and the foreign demand for our agricultural products. (*Bureau of Agricultural Economics, U. S. D. A.*)

The demand on the part of urban consumers for food and clothing was also greatly reduced, the falling off of industrial activity being accompanied by reduced employment in factories, on railroads, and in construction. Compared with the prosperous summer months of 1929, factory payrolls by the end of 1931 were reduced about half, railroad payrolls were reduced about 40 percent, and payrolls in construction work more than 60 percent. Several million workers were totally unemployed, many more were employed only part-time, and wage rates of others were reduced. Moreover, the portion of consumers' money income available for food and clothing has been reduced even more relatively than the total income, because rent and other living costs have declined only moderately.

During the later months of 1931 a substantial depreciation in bond prices restricted issues and sales of new securities. As a consequence the volume of construction will tend to remain at an unusually low level at least during the first half of 1932. Many long-time projects will be held up until it is believed that they can be financed to advantage.

Conditions in a number of industries producing goods for current consumption, such as shoes, textiles, and automobile tires, were fairly active in 1931. These goods wear out and have to be replaced. Before the depression can definitely end, however, there must be increased activity in the building industries and in other industries making durable goods. There is little possibility of such a resumption in 1932, altho the readjustments necessary to that improvement are being brought about. These readjustments include reduction in building costs and new financial arrangements for many properties built before 1930.

Other factors which suggest a continuation of the relatively low level of domestic demand during at least the first half of 1932 are: (1) the continued unusually low purchasing power of the consumer; (2) probable wage reductions which will reduce the funds available to laboring people for the purchase of farm products (except as such reductions stimulate employment); and (3) low money incomes of farmers in 1931.

Outlook for Foreign Demand. The foreign demand for agricultural products of the United States has fallen to a low level, and at the present time there is little evidence of improvement in the near future. Agricultural products exported in considerable amounts are cotton, tobacco, wheat and flour, pork and pork products, and apples. The last three are important to the Illinois farmer. The decline in foreign demand is due: (1) to the world-wide business depression with its attendant lowered price-level and general disorganization; (2) to increases in trade barriers such as tariffs, milling quotas (which require the use of a certain percentage of home-grown wheat), and the like; (3) to depreciation in the value of the currency of a number of countries; (4) to continued high production of agricultural products in foreign countries; (5) to uncertain financial and credit conditions; and (6) to political unrest.

The principal countries which buy American agricultural products have all been affected adversely by the world-wide depression and hence have a reduced purchasing power. Most of these countries, like the United States, have been interested in protecting their home agriculture and maintaining production and prices even in the face of the depression and the

general decline in prices. In doing this, many restrictions have been placed on imports into these countries. The depreciation of foreign currencies has also been important, for less than one-fifth of our agricultural exports normally go to countries that are still definitely on a gold basis. The immediate effect of a depreciated currency is to encourage exports and to discourage imports on the part of the country making the change. This makes it more difficult for the United States to export to these countries, and makes it relatively easy for them to sell to us.

In an effort to be self-sufficient many of the importing countries have also increased their agricultural production, and hence are less dependent upon outside countries. At the same time the exporting countries have expanded their exports in order to make increased payments abroad. Uncertain financial and credit conditions, a large volume of international debts, a reduction in the amount of international credits granted, coupled with political unrest in some countries, have been factors in reducing foreign demand for American products.

The most important buyer of our farm products is England. Exports to that country are likely to be increasingly difficult because of the probability of a general trade pact which will give preference to countries within the Empire, such as Canada and Australia, and because of the depreciation in the value of English money. Likewise, conditions in Germany, Italy, China, and other countries which import our farm products appear unfavorable for an improved demand.

With these deep-seated causes it is evident that there not only is less actual demand from other countries, but the competition for such demand has increased and is becoming increasingly difficult to meet. A considerable period of time will be necessary for adjustments to work themselves out to the point where we may expect as active a demand from foreign countries as we had from 1924 to 1928.

These factors are of particular importance in connection with the foreign demand for wheat and hogs.

Agricultural Credit. Credit will not be easy for farmers to obtain for either short-time or long-time loans in 1932. The decline in inventory values and the lowered level of incomes reduce the amounts which can be safely borrowed or loaned.

The supply of local funds available for short-time loans has been reduced in most communities thru the decline in bank deposits, slow collections on some outstanding loans, decline in the value of investment bonds, and the necessity of bankers maintaining a highly liquid position because of the need of some customers for large parts of their usual cash balances and the desire of others to hoard currency. In some communities the difficulty has been accentuated by bank failures.

From December, 1928, to November, 1931, total time and demand deposits in banks in the Federal Reserve System in places of less than 15,000 population in the corn-belt states declined 27 percent. Demand deposits declined more than time deposits.

During 1931 the money in circulation in the United States increased about 750 million dollars in spite of the decline in prices and in business activity which would normally reduce the demand for currency. This

increase has continued, allowing for seasonal variation, so far in 1932. Our monetary gold stock was 142 million dollars, or 3 percent, smaller at the end than at the beginning of 1931.

Following the abandonment of the gold standard in England, the monetary gold stocks of this country declined by 728 million dollars in six weeks. To meet this drain of gold and the withdrawals of currency, the banks of the country borrowed heavily at the Reserve banks and the Reserve banks bought large amounts of securities in the open market. The manner in which the Federal Reserve System met the test placed on it in September was an excellent example of its fundamental soundness.

From August to December, 1931, an average of 60 high-grade bonds declined from 98 to 79. Bonds of lower grade declined even more. Since December there has been some recovery. This decline in the prices of bonds increased the difficulty of many banks in taking care of their customers in the usual manner.

The Reconstruction Act recently approved by Congress makes 200 million dollars available for loans to farmers for crop production, in areas where credit to put in crops cannot otherwise be obtained, on much the same basis as the loans were made in the drouth area last year. The corporation may also lend to banks, agricultural credit corporations, federal intermediate credit banks, credit unions, and livestock credit corporations.

Communities where short-time credit requirements are not adequately taken care of should give consideration to the development of agricultural credit corporations to tap outside sources of capital, or of credit unions to pool local capital.

Basic to an improvement in the lending power of local banks is an improvement in prices which will permit more funds to accumulate, but until this time comes the following suggestions will help the situation. The spare cash of the community should not be hoarded, but should be put where it can be used to finance the community; withdrawals should be limited to legitimate needs; and some payments should be made on outstanding loans. In connection with the latter, the use of the installment plan of paying bank notes is adapted to many systems of farming. Above all, people should avoid additional borrowing unless they see clearly a way to repay with current income.

The situation with respect to mortgage loans has been made difficult by the decline in value of bonds of the Federal and Joint Stock Land Banks. Unless these banks can sell 5-percent bonds at par, they cannot make any loans. Federal Land Bank bonds bearing 5-percent interest are quoted currently at 92-93. The insurance companies have been handicapped by the decline in value of securities and by the large amount of loans made to policy holders.

Recent amendments to the Federal Farm Loan Act provide that the federal government will, on call, subscribe 125 million dollars additional capital to the Federal Land Banks. This may make it possible for these banks to resume lending, altho considerable recovery will have to take place in the general bond market before bonds can be sold. This law provides that 25 million dollars of this sum be used exclusively to permit the directors of the several banks to extend any obligation which may be or may become unpaid under any mortgage for a period of five years or

less. That this will not permit any general moratorium is indicated by the fact that it amounts only to something less than half the annual interest and amortization payments on mortgages in the system. Loans may also be made by the Reconstruction Corporation to any mortgage loan company, Federal Land Bank or Joint Stock Land Bank. Such loans, if made, will likely be used to prevent difficulties with interest payments on bonds rather than in the initiation of new loans to farmers.

Renewals on mortgages now usually require some provision for regular payments on loans; new loans, when made, are for lower amounts than were customary up to three years ago.

Real improvement in the mortgage credit situation depends on greater confidence in the general financial situation and in the farming situation in particular. From a long-time viewpoint, periods of declining prices are normally periods of declining interest rates; substantial declines in interest rates are likely when confidence is finally restored.

Labor and Supplies. The abundant supply of farm labor thruout 1931 and the low wages paid at the end of the year indicate lower wages for farm labor in 1932. The farm wages index in December, 1931, was slightly below the 1910-1914 level, representing a decline of slightly more than two-fifths since October, 1929.

Declines in activity in the building industry are forcing readjustments in costs which probably have only just begun in most communities. Wholesale prices of building materials in November, 1931, stood at 130 percent of the pre-war prices, a decline since October, 1929, of 24 percent. In June, 1931, the retail prices of materials used in farm buildings were 143 percent of the 1910-1914 prices.

Wholesale prices of farm machinery declined 6 percent between September, 1929, and December, 1931, standing at 126 percent of the pre-war price (1910-1914). Retail prices in June, 1931, stood at 153 percent of pre-war prices, a decline of 6 percent since October, 1929. Farmers in 1931 purchased only those machines which were absolutely necessary and will continue the same policy during 1932. Machinery cannot be purchased and paid for in the pre-1929 volume until prices are brought more into line with farmers' purchasing power.

With low farm earnings in 1930 and 1931 and prospects for low incomes in 1932, and with a shortage of both cash and credit, Illinois farmers will be forced to reduce to the minimum their cash expenditures during 1932. Animal power and low-priced labor will both be used to replace certain kinds of mechanical power and labor-saving machinery.

Lower prices for the raw materials used for fertilizer indicate that prices to farmers will likely be lower during the coming spring. During the last half of 1931, wholesale prices of nitrogenous fertilizers were much lower than in the same period in 1930.

Farm Power. The estimated number of horses and mules in the United States continued to decline in 1931 (from 18.4 million head to 17.8 million). A reduction of 7½ million head occurred between 1920 and 1930. The decrease during 1931 was 3.7 percent for horses and 2.6 percent for mules. The rate of decrease in horses and mules on farms has not kept pace with the increase in motorization.

The extent to which mechanical power has been replacing animal

power on farms is indicated by Census figures, which show that there were 246,000 tractors on farms in the United States in 1920 and 920,000 in 1930. Farm trucks increased from 139,000 in 1920 to 900,000 in 1930.

Farm prices of horses and mules declined approximately 12.3 percent from December 15, 1930, to December 15, 1931; this was only half the average decline for all farm products. The farm price was influenced by the fact that the average age of horses is much above a long-time normal. The price at central horse markets for desirable types and weights of horses and mules showed no decline during the year.

Future prices of horses and mules will depend upon both the available supply and the demand for them. Each of these will in turn depend upon a number of factors. Because of the scarcity of good breeding stock, several years will elapse before the decrease is likely to be checked. Data from 11 corn-belt and western states indicate that the number of registered stallions declined 16 percent between 1929 and 1931. The slump in the number of registered jacks was even greater. The scarcity of good sires is accompanied by a decided shortage of young work mares suitable for breeding purposes. These reductions, together with the known high average age of work stock, indicate that if breeding is not soon resumed on an extensive scale there will be a continued reduction in the number of good work horses and mules.

There seems to have been some tendency recently to make a greater use of available animal power on farms. Following are some of the reasons for this: (1) under existing price conditions it is difficult for many farmers to meet out-of-pocket costs for fuel and repairs but they have low-priced feed for work animals; (2) weather conditions during the past season have allowed more time for doing field work; (3) increased supplies of man labor are available at reduced rates; (4) there is increased use of big teams.

It is possible that in the near future there will be still further increases in the use of animal power on farms, providing there is no great increase in the cost (price) of feeds and man labor. Weather conditions, however, will not always be so favorable as in the past year, and it is questionable whether peak loads can be met as economically by having extra horses as by using mechanical power. Farmers who have both horses and tractors may try to use their horses more and their tractors less.

With the necessity of reducing costs of production, farmers should give increased attention to balancing the supply of power so as to provide for the most economical operation of the farm. Those who expect to continue to use animal power on their farms should try to replace their old stock with young mares at present prices. The raising of colts, in the main for replacement purposes, is a conservative method of producing farm power.

OUTLOOK FOR FEED CROPS, HAY, AND FEEDSTUFFS

FEED CROPS IN GENERAL

The total tonnage of feed grains from the 1931 crops in the United States was 7 percent below the average tonnage for the five-year period 1925-1929. There is on hand a smaller tonnage of commercial feeds but a

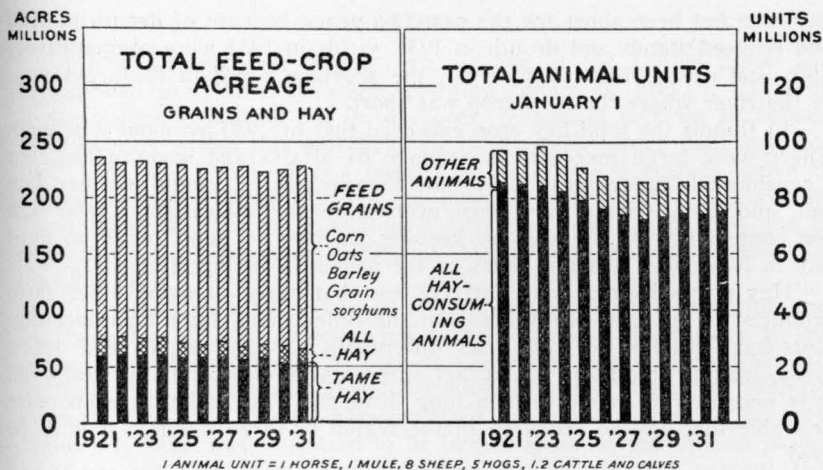


FIG. 5.—FEED CROP ACREAGE, HAY ACREAGE, AND LIVESTOCK NUMBERS, UNITED STATES, 1921-1932

From 1927-1931 total animal units on farms were nearly constant. A considerable increase was evident on January 1, 1932. Feed crop acreage for the past ten years has been quite uniform, with a slight trend downward due largely to some decline in hay acreage. The increase in feed crop acreage in 1931 was sufficient to provide ample feed supplies for the increased numbers of livestock. (*Bureau of Agricultural Economics, U.S.D.A.*)

larger supply of materials from which by-product feeds are produced. The hay crop in 1931 was 16 percent below the 1925-1929 average. The mild open winter has helped to conserve the short supplies of feedstuffs in spite of large numbers of farm animals.

On January 1, 1932, there were larger numbers of livestock (except work animals) on farms than a year earlier. The increase was 2.4 percent in cattle, 2.2 percent in sheep, and 9.4 percent in hogs. In terms of animal units, the number was 2 percent larger. The present ratio between prices of feeds and livestock products is less favorable to feeding than a year ago but it is still fairly good. This reduction in feeding ratio reflects in part the increase in livestock numbers at a time when supplies of feed are below average.

Supplies of both corn and grain sorghums were larger in 1931 than a year earlier, while supplies of oats and barley were lower. The total supply of corn available at the beginning of the 1931-32 season, including carryover, was estimated to be 24 percent, or 520 million bushels, larger than last year's short supply but about 200 million bushels below the 1925-1929 average.

The large crop and carryover of wheat, together with low prices, resulted in a continuation of heavy wheat feeding, particularly until new corn became available.

HAY AND PASTURE

The production of hay in 1931 was 2.5 percent smaller than in 1930 and 16 percent smaller than the average for 1925-1929. Altho the national

hay crop has been short for the past two years, because of drouth in 1930 and reduced stands and drouth in 1931, yields in 1931 were comparatively high east of the Mississippi river, the shortage being in the areas west of the river where the corn crop was short.

In Illinois the total hay crop exceeded that of 1930 by about 9 percent. There were large increases in tonnage of alfalfa and soybean hay, but a considerable reduction in clover and timothy hay. The mild weather, late fall, and early winter have been even more favorable than a year ago for conserving hay supplies by keeping pastures in good condition until late in November in many parts of the principal feeding areas.

Hay prices have fallen relatively less than those of many other farm products in the last two years. On the other hand, high transportation costs have resulted in wide price differences between surplus and deficit areas, making it difficult to market surpluses at satisfactory prices when it is necessary to move them a long distance. This makes it even more desirable that hay be produced in the region or locality where it is to be used.

In line with increasing numbers of cattle and dairy cows and a declining number of horses, the demand is for legume hay rather than for grass hay. With both prices and yield favoring legume hays, this shift is in line with good farming practices in the state. The outlook for soybeans favors the harvesting of such amounts of this crop for hay as can be used on the farm. Because of the shortage of legume forage, as well as total forage, in the United States the past two years, forage crops are likely to be relatively higher than feed grains for the balance of this season.

Some increase in the acreages devoted to legume hays and to productive pastures seems warranted in view of the increased numbers of livestock and the low prices prevailing for grain crops.

FEEDSTUFFS

Consumer demand for straight and commercially mixed feeds has been materially reduced, owing principally to the larger supplies of feed grains, including cheap wheat, for 1932 compared with 1931, the lower purchasing power of the dairy and livestock industries, and the mild winter. This reduced demand for commercial feeds comes in spite of larger numbers of livestock, a smaller supply of commercial feeds, and the lowest prices for such products since the World War. The combined tonnage of feed grains and commercial feeds are smaller than average but considerably larger than for 1931.

The production and carryover of cottonseed and cottonseed products is large. Supplies of linseed meal are short, owing to a small crop of flax seed and reduced crushing activity. Larger production of soybeans has led to increased crushings, resulting in increased supplies of soybean meal. However, the supply of soybean meal constitutes only a small proportion of the total supply of high-protein concentrates.

The production of alfalfa meal has been reduced because of smaller supplies of alfalfa hay, yet the supplies at the mills are large.

CORN

A moderate increase in the corn acreage of the United States may be expected in 1932 if favorable planting conditions prevail. If an increase occurs, it will be the third successive annual increase in acreage. With average yields this will mean in 1932 a crop larger than any since 1923. The 1931 yield of 24.4 bushels an acre was 4 bushels above the abnormally low yield of 1930 but one bushel below the 1927-1931 average. The total United States production in 1931 of $2\frac{1}{2}$ billion bushels was approximately the same as the 1929 crop but half a billion bushels more than the 1930 crop.

Up to January 1, 1932, only 30 percent of the crop harvested for grain had been fed or sold, as compared with 36 percent on January 1, 1931, and a four-year average of 35 percent. The total supply of corn available on November 1, 1931, was about 200 million bushels below the 1925-1929 average. The total amount harvested for grain and remaining on farms January 1, 1932, was estimated to be larger by about 420 million bushels, or 38 percent, than a year ago and 65 million bushels, or 4 percent, more than the average of the four years 1927-1930.

Corn prices have declined sharply since the new crop became available for market. The lower prices have resulted in unusually small country marketings. Receipts at the 13 principal markets during November and December, 1931, of about 23 million bushels were only 51 percent as large as the receipts for 1930 and only 42 percent as large as the average November receipts for 1925-1929. The visible supply of corn (the corn in store at terminal markets) at the beginning of February was 13.4 million bushels, which was about 50 percent of the average of the five years 1927-1931. The large crop in the South and in most other normally deficit areas has greatly reduced shipment of corn into those areas.

The foreign demand for corn so far this season has been unusually light. Present prospects for the Argentine crop, available for export about April 1, are much above average. The acreage in corn in Argentina is reported to be slightly larger than a year ago, and weather conditions so far in the growing season have been unusually favorable.

With these conditions—larger stocks on hand, lower average farm prices, a larger production in normally deficit areas, slow cash demand, and an enlarged production in Argentina—there is very little prospect for corn prices to advance materially during the first half of 1932. The increased numbers of all kinds of livestock, except horses, will tend to strengthen corn prices and will have the greatest influence during the second half of the year. During this period the prices will be determined to a considerable extent by the prospects for the new crop. However, if weather conditions are favorable and the increased acreage predicted for 1932 develops, there will be slight possibility for material increase in the price even for the latter part of the year.

The presence of chinch bugs over an unusually large portion of the corn belt of Illinois presents a substantial threat to the 1932 corn crop. Farmers in the endangered area, especially those in the heavier infested portions should, if possible, make such field adjustments as will provide

the maximum protection. These include: (1) planting no corn immediately adjoining barley or wheat fields; (2) using barriers between corn and small grain; and (3) using chinch-bug resistant varieties of corn in the heaviest infested areas.

OATS

The 1931 oats crop of 1,112 million bushels was one of the smallest in recent years and was the result of low acre-yields, as the 1931 acreage was about the same as for 1930. Total supplies of oats in the United States on August 1, 1931, were estimated at approximately 1,192 million bushels, which was 157 million bushels, or 13 percent, less than for 1930. The estimated world production of oats for 1931 was nearly 7 percent below that of 1930.

Consumption of feed grains has been restricted by the open winter. Nevertheless oats supplies on farms, January 1, 1932, were smaller than on the corresponding date of any year since 1927, being about 100 million bushels less than in 1931.

Prices of oats thus far during the current season have been the lowest in thirty years despite the small crop. On January 15, 1932, the Illinois farm price was 19 cents a bushel as compared with 29 cents for the same date in 1931.

Oats continue to hold their own on Illinois farms because the crop is a satisfactory feed for productive livestock as well as for work stock and because it fits in between corn and clover in crop rotations.

The present price of wheat does not favor the substitution of wheat for oats as a nurse crop. In those counties in the northern half of Illinois where the chinch bug is not a serious threat, barley can be profitably substituted for oats.

With the declining number of horses and mules, it is apparent that the market for oats will depend primarily upon the numbers of cattle, hogs, and sheep produced. Many farms, particularly in east-central Illinois, would profit by a material reduction in the oats acreage and a corresponding increase in the acreage of legumes.

BARLEY

The 1931 barley crop of 199 million bushels was only about two-thirds as large as the 1929 and 1930 crops. The small crop resulted largely from low acre-yields and the abandonment of acreage in the Dakotas and Montana. Altho the acreage seeded in 1931 was about the same as in 1930, the acreage harvested was 10 percent less than in 1930 and 15 percent less than in 1929. The average yield an acre for the United States was only 17.3 bushels as compared with 24.1 bushels in 1930 and 20.7 bushels in 1929.

The world barley production in 1931 (in the countries reported) was about 15 percent below that of 1930. Barley stocks in the United States on August 1, 1931, carried over from the 1930 crop, were the largest in recent years with the exception of 1929. However, considering both carry-over and current production, the total supply of barley on hand August 1, 1931, was only 220 million bushels as compared with 320 million bushels in 1930 and 306 million bushels in 1929.

Prices of barley declined less in 1931 than prices of other grain crops, owing to the relatively short crop. The Illinois farm price on January 15, 1932, was 40 cents as compared with 50 cents in 1931. Feed grades of barley have been selling in Minneapolis for 40 to 45 cents a bushel (January, 1932) as compared with 30 to 40 cents a year ago, while barley of malting quality has been bringing 53 to 55 cents, or practically the same price as a year ago.

The present relatively strong market for barley in comparison with other feed grains results from an unusual distribution of the barley crop in 1931. In view of the relatively small supplies of barley compared with livestock numbers in the present deficit barley area centering about the Dakotas, it seems probable that this relatively favorable marketing situation for barley may continue at least until the new barley crop is available for feeding in the northern portion of the barley growing areas. At that time the demand for barley will probably return to its normal relationships to feed grains, unless there should be another short crop of barley or some unusual distribution in the production of feed grains in 1932.

Based on average yields and average farm prices, barley appears to be a more profitable crop than oats for the northern half of Illinois. However, there will be a very decided hazard from chinch bugs for barley sown in any of the heavier infested portions of the area unless heavy spring rains destroy a large percentage of these insects.

Bright, mellow barley of desirable varieties commands substantial premiums when shipped in straight carlots. Wisconsin Pedigree No. 37, or 38, or Velvet barley grown under favorable conditions will fulfill the requirements.

THE CHINCH-BUG THREAT

Dry seasons for two years have permitted a rapid development of chinch bugs. There are in hibernation quarters this winter sufficient numbers of these pests to cause more or less damage over nearly half the state. The general area of infestation has been worked out (Fig. 6), tho the boundaries cannot be considered at this time as very definite.

Most of the hibernating bugs will be found in the bases of the bunch-forming grasses or along the south sides of hedges and bushy fence rows, or in any place where there is enough trash—leaves, grass, the loose bark of trees, bark of fence posts, or other materials—to afford shelter and protection during the winter. In fact, they may be found in any place where the sun shines brightly during the afternoons of October and early November.

In burning off areas where the bugs are sheltering, a back fire will burn deeper and kill more of the bugs than burning with the wind.

The chinch bug feeds primarily on small grains and corn. It prefers barley to all other small-grain crops, with spring wheat, winter wheat, rye, and oats preferred in about the order named. It does not feed on legumes such as soybeans, red clover, sweet clover, alfalfa, cowpeas, or field peas; therefore fields planted to these crops will not be injured no matter how bad the infestation. Small strips of these crops 1 to 5 or 10 rods wide between small grains and corn are not effective, however, in stopping the migration of the bugs into the corn if they are at all abundant. Where

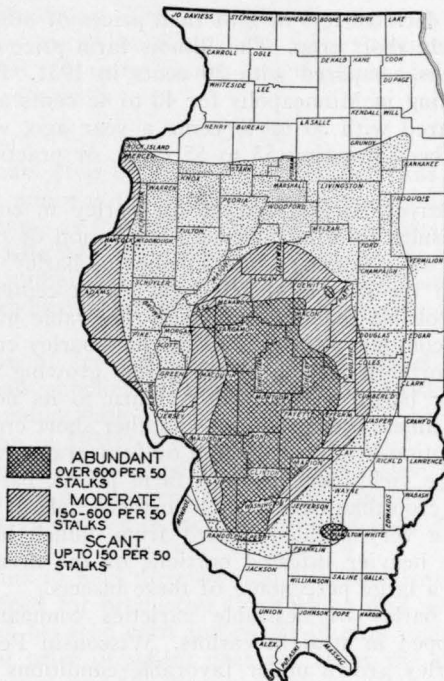


FIG. 6.—AREAS OF PROBABLE CHINCH-BUG DAMAGE IN 1932

it is not possible to avoid having corn and small grain in adjoining fields, creosote or coal-tar barriers may be used at harvest time to prevent the bugs from going from the small grains into the corn.

In areas of moderate to heavy infestation barley will probably suffer severe injury if planted next spring.

OUTLOOK FOR OTHER FIELD CROPS

WHEAT

The low prices that have prevailed for wheat are resulting in some readjustments in production. For the world as a whole a slight reduction of acreage is indicated. In the United States the seedings of winter wheat in 1931 were reduced by 10 percent and in Illinois by 22 percent. Seedings have decreased also in Argentina and Australia, but there have been some increases in European countries. Changes in wheat acreages to adjust to low prices are necessarily slow because some wheat-producing areas have little in the way of alternative crops and in other areas the low prices of other crops slow down the rate of adjustment.

The 1931 crop of winter wheat in the United States was very large as the result of unusually large acre-yields. Both the acreage and the yields of spring wheat were severely reduced by drouth. As a result of the large

production in 1931, the large carryover from 1930, and slow exports so far this season, this country is still definitely on a rather large export basis.

Indications are that the production of wheat in the United States will be reduced in 1932, not only because of reduced seedings of winter wheat, but also because of the poor condition of the wheat in the western part of the winter-wheat belt. The production of spring wheat is uncertain, but a normal acreage and acre-yield would yield a crop far in excess of the low production of 1931 and would reduce the premiums which have been paid for the 1931 crop.

Foreign demand for United States wheat will likely continue low because of the reduced purchasing power of foreign countries and the increased import restrictions raised by many of them. Depreciation in currency values in England, Canada, and Australia makes it difficult for the United States to sell to England. This difficulty may be increased by the adoption of a general trade agreement between the different countries within the British Empire which will favor trade within the Empire.

Since July, world wheat prices have averaged a little lower than in the first half of 1931. During most of the season United States prices of winter wheat have been considerably above the normal relationships with the Liverpool prices; this makes free exportation impossible.

Because of declines in prices of feed grains, it is likely that less wheat will be fed in 1932 than during the past year, except in areas where there is a shortage of feed grains.

The Russian wheat situation remains uncertain.

With average acre-yields the prospective crop of soft red winter wheat in the United States will be about 140 million bushels. The annual utilization within this country is about 150 million bushels. Altho it is possible to substitute the softer and lower-protein hard winter wheats for soft red winter wheat in certain classes of flour, crops of soft winter wheat of about the size indicated above have in recent years commanded substantial premiums as compared with hard wheat. The possibility of substitution, however, sets a definite limit to this premium.

About 430 million bushels of wheat are apparently available for export during the balance of the season and for carryover. In view of the slow current rate of exportation, the carryover at the end of the year is likely again to be large. The consumption in 1930-31 was estimated at 728 million bushels. The acreage now planted to winter wheat, with average abandonment and yields together with an average spring wheat crop, will produce about that quantity, leaving the carryover for export or additional feed. It would require very serious damage to the winter-wheat crop to reduce wheat supplies in this country to the point where exports would not have to be made or larger amounts than usual fed, in order to reduce the carryover to normal proportions. Serious damage to the winter-wheat crop would tend to advance wheat prices, however. Farmers who may be considering sowing spring wheat should watch the reports on the conditions of the winter-wheat crop during the balance of the winter.

Before it is time to sow another winter-wheat crop it may be possible to make a better appraisal of the wheat situation than at this time. Then it can be determined how far the tendency to reduce acreage has offset the influence of the large storage stocks.

SOYBEANS

Soybean production in United States continued to expand in 1931, owing to further increase in acreage and the highest acre-yields on record. The commercial crop of 1931 amounted to 14.9 million bushels, 87 percent of which was produced in six states—Illinois, Indiana, North Carolina, Missouri, Iowa, and Ohio. Illinois alone produced more than 40 percent of the total. This large production in the face of weak demand caused by a marked decline in prices of other vegetable oils and protein concentrates resulted in the very low prices received by Illinois growers.

World production of soybeans has continued high, and stocks on hand are burdensome. Largely because of higher tariff restrictions, however, imports of soybean oil, cake, and meal into the United States were greatly reduced for the year ending September 30, 1931. For the first time since the development of the soybean crushing industry in the Middle West, the domestic production of soybean meal exceeded imports. During the year ending September 30, 1931, 121,455 tons of soybeans were crushed, as compared with 48,000 tons in 1930 and 26,400 tons in 1929. Imports of cake amounted to 23,998 tons during the same period in 1931, as compared with 73,524 tons in 1930 and 69,530 tons in 1929.

Stocks of old beans at mills were abnormally high at the end of September, 1931. The crop has moved to market somewhat more slowly than in previous years, when much of it was sold under contract; hence a larger than normal portion of the 1931 crop remains to be marketed.

Ample supplies of linseed oil at relatively low prices and increased supplies of soybean oil have had a tendency to force soybean oil into industries using cheap nondrying oils and to bring the price more into line with prices for cottonseed oil. Crude soybean oil in tank cars f.o.b. mills was quoted at 3.25 cents a pound on January 4, 1932, compared with a December, 1930, price of 6.7 cents. The average for December, 1925-1929, was 9.6 cents. Soybean oil meal has ranged from \$20 to \$25 a ton at the mill since the spring of 1931, with some sales at lower figures. The lower prices of the new crop of soybeans led to some export movement in November. This, however, is the result of an unduly low price rather than an indication of the development of a permanent new outlet. A better understanding of the feeding value of soybean meal and the value of soybean oil in paint may aid the price of soybeans by stimulating increased use of these products.

The soybean situation does not warrant any expansion in acreage for 1932 except where the crop can be utilized on the farm for hay purposes.

CLOVER AND ALFALFA SEED

The production of red-clover seed in the United States for 1931 was about 20 percent under that of 1930 and 27 percent below the 1927-1931 average. Imports for 1931 were slightly more than in 1930 but less than one-fourth the 1925-1929 average. Some red-clover seed was exported. Little foreign competition is expected in view of small quantities in other countries. Because of relatively low production in 1930 and 1931 and the greatly reduced importation, the price of red-clover seed may be expected to remain relatively higher than the average of agricultural products.

Supplies of alsike clover seed are small, owing to a small carryover from previous years, decreased production in 1931, and declining imports.

Sweet-clover seed has a relatively small carryover. Practically no imports came in during 1931, and production for 1929, 1930, and 1931 was about equal to production requirements. The demand for red clover, alsike, and sweet clover declined during the past year. If the shortage in acreage of hays is made up, all available seed will be required for this purpose. Prices of alfalfa and clover seed have declined less than prices of many other agricultural products.

Stocks of alfalfa seed are ample for requirements. Only small export and import movement occurred during the last year, and while there was a somewhat restricted production, there was also a reduced demand. Prices are about one-third less than a year ago and also about one-third under the 1927-1931 average.

Present prices of alfalfa and sweet-clover seed favor the expansion of these crops as biennial legumes on lands that have sufficient lime to insure success.

REDTOP SEED

The production of redtop seed in 1931 was 533 cars of 30,000 pounds, or slightly more than the combined short crops of 1929 and 1930. The harvested acreage was 7 percent greater than in 1930 and was the third largest crop since 1922. The amount of seed used during the past year was about normal. The carryover of 225 cars was rather large. While the carryover is normally widely scattered over the country, more than the usual proportion of the present carryover is concentrated in the production area of Illinois. In view of this fact and the existing low prices of blue-grass seed, a redtop crop as large as that of last year is likely to result in burdensome supplies and continuation of the low prices received since harvest.

BROOMCORN

Forty-eight thousand tons of broomcorn were harvested in the United States in 1931. This was about 2,000 tons less than the average annual requirement for domestic consumption (45,500 tons) and for export (4,500 tons). The carryover on May 31, 1932, will probably be about 22,000 tons, as compared with 24,000 tons for May 31, 1931. This would indicate the need for a normal acreage in 1932.

Over the last two years the price of broomcorn has declined in about the same ratio as the price of corn. The demand during 1932 will probably be no stronger than in 1931; so that any increased acreage, if accompanied by higher than average yields, is likely to result in extremely low prices.

POTATOES

The total United States potato acreage in 1932 is likely to be slightly lower than in 1931 if growers carry out their intentions as reported to the Department of Agriculture on January 1.

For the past two years the acreage of potatoes has increased. In common with several other corn-belt states, the 1932 intended acreage for Illinois is about a 4-percent increase above that of 1931. The total pro-

duction of potatoes in the United States in 1931 was about 376 million bushels, or about an average crop, as compared with 333 million bushels in 1930 and 329 million bushels in 1929. For the past three years acre-yields have been low. With an average yield of 120 bushels an acre, an acreage equal to that of 1931 will yield a surplus of this crop. Prices received by producers for late potatoes during the fall months of 1931 were about half those received a year earlier, and came as a result of a 13-percent increase in total supply and a general decline in food prices.

With average yields and continued low demand, the price of potatoes will continue low for 1932.

If credit conditions do not improve before planting time, there may be a further reduction in potato acreage in the heavy producing section. Illinois farmers should watch for the March intentions to plant, which are more accurate than earlier reports. Many Illinois farmers can reduce their cash expenditures by growing potatoes for their own use.

OUTLOOK FOR LIVESTOCK AND LIVESTOCK PRODUCTS

DAIRY OUTLOOK

Prices of dairy products in 1931 were low in comparison with previous years but were relatively higher than most other farm products. This relationship tended to stimulate dairy production. Largely owing to drouth, the percentage increase in total production was less than the increase in producing animals.

The number of milk cows and heifers on January 1, 1932, was $3\frac{1}{2}$ percent larger than last year and 6.4 percent larger than two years ago. Corresponding increases in Illinois were 4 percent and 7 percent. Reduced culling has been the chief cause of the increase. In the country as a whole no change has occurred in the past year in the number of yearling heifers kept for milk, but in Illinois an 8-percent decrease has taken place. About the same number of heifer calves is being saved as last year; this is sufficient for normal replacements.

The 1931 production of manufactured dairy products, as a group, was about the same as in 1930. Decreases occurred in the production of cheese and condensed and evaporated milk, but these were counterbalanced by increased butter production.

The consumption of fluid milk declined in most of the large markets. It is estimated, however, that a material increase occurred in the consumption of manufactured products as a group. While consumption of butter and evaporated milk increased, consumption of cheese and condensed milk declined.

Relatively larger consumption than production resulted in smaller than normal storage stocks at the end of 1931. On January 1, 1932, stocks of butter, cheese, and condensed and evaporated milk were respectively 58.1 percent, 12 percent, and 36.5 percent less than a year ago.

Both imports and exports of dairy products declined during 1931. Net imports of all dairy products, in terms of milk equivalent, declined approximately 34 percent. Reduced importations of milk and cream from Canada

resulting from increases in tariff rates beginning in June, 1930, constituted most of the decline.

Low foreign prices for dairy products together with the depreciated exchange values of foreign currencies tended to retard domestic butter prices during the early fall season. The volume of imports, however, was small. Abnormally large winter production is partly the cause of present low prices.

Several factors will influence current and future dairy prices. Mild winter weather, relatively lower prices of other farm commodities, especially feed, and more dairy cows will increase the total milk output. Small storage holdings, however, will partly compensate for the increased output, especially during the remainder of the season.

Decreased margarine consumption and low butter prices favor larger butter consumption. Increased demand undoubtedly would result from an increase in employment.

Prices of old and low-producing cows will be determined largely by prices of beef cattle. Prices of good dairy cows will be influenced more by the difference between the price of feed and dairy products.

Low dairy price-levels seem likely to prevail. Reduction in costs by closer culling and better methods is practically the only adjustment which the individual producer can make in the face of low prices.

BEEF CATTLE

The number of cattle on farms in the United States increased 1½ million head in 1931, the fourth consecutive year to show an increase. The cattle population in recent years has been as follows:

<i>Year</i>	<i>On farms January 1 (Million head)</i>
1918.....	71.2
1928.....	56.7
1929.....	57.5
1930.....	59.7
1931.....	60.9
1932.....	62.4

The cattle cycle is about sixteen years in length. The low points in numbers were reached in 1912 and 1928; the last peak year was 1918. Numbers on farms January 1, 1932, were higher by 2.4 percent than on January 1, 1931, and higher by 8 percent than on January 1, 1928, the recent low point. The increase of 5.7 million head in the past four years corresponds to an increase of 11.4 million head between 1912 and 1916, a similar period in the previous cattle cycle. The largest increase has been in cows and heifers two years old and over (probably more than half this increase is in dairy cattle). A decrease occurred in yearling heifers kept for milk cows and in steers during 1931.

While the total number of cattle available for slaughter in 1931 was larger than in 1930, the number of federally inspected cattle slaughtered was 62,000 less than in 1930, amounting to 8.1 million head. This decrease was probably offset by an increase in farm slaughtered and other locally slaughtered cattle. The slaughter of calves under federal inspection was 121,000 head greater in 1931 than in 1930, of cows and heifers

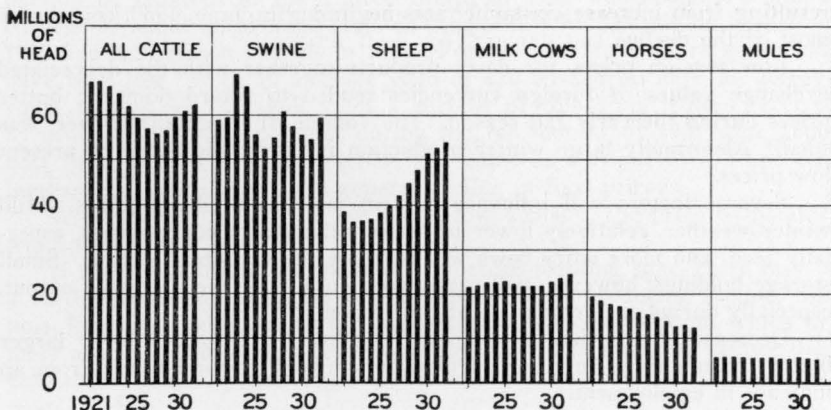


FIG. 7.—NUMBER OF LIVESTOCK BY CLASSES, 1921-1932

Cattle numbers declined steadily from 1922 to 1928, and have since increased moderately each year. Further increases during the next few years are expected because of the tendency to hold back breeding stock after cattle prices reached the relatively high level of 1928. Hog numbers expand and contract also in a rather definite cycle, but the cycle is much shorter in duration than that of cattle, and the yearly changes in numbers are more pronounced. The number of sheep on farms increased rapidly from 1922 to 1932. The number of milk cows, on the other hand, has not changed greatly during the past ten years, altho the trend has been upward in recent years. (*Bureau of Agricultural Economics, U. S. D. A.*)

243,000 less, and of steers 205,000 head more. Altho the total number of cattle available for slaughter in 1932 is greater than a year ago, there are fewer steers; therefore any increase in slaughter which occurs in 1932 will be largely in cows and heifers.

The estimated number of cattle on feed for market January 1, 1932, in the corn-belt states was about 5 percent less than a year earlier. There is an increase of 8 percent in the five principal cattle-feeding states east of the Mississippi river, which is more than offset by a decrease of 18 percent in South Dakota, Nebraska, and Kansas. The total number of cattle on feed in Iowa, Missouri, and Minnesota is approximately equal to that of a year earlier.

In previous periods of low prices for cattle, there has been a tendency for breeders to delay marketing aged breeding stock. It is probable that under present conditions the market supply of slaughter cattle during the first half of 1932 will be about the same as in 1931. The supply of well-finished steers, however, is likely to be smaller, with most of the reduction occurring during the second quarter. The supply of feeder cattle during the last six months of 1932 will be determined largely by: (1) the trend of cattle prices during the first half of the year; and (2) feed and financial conditions in western cattle-producing areas next fall.

Total importations of fresh and frozen beef into the United States during the first 11 months of 1931 amounted to 1.8 million pounds, slightly less than one-fifth as much as imported in the corresponding

period in 1930. Lower consumer income and the decline in the general price-level reduced the demand for beef during 1931. The per-capita consumption of federally inspected beef and veal during 1931 was approximately equal to that of 1930. Prices of cattle and beef were therefore materially lower. For the year as a whole, the demand in 1932 will probably be less than that in 1931, owing: (1) to the prospect of a continued low level of consumer income; (2) to the tendency for changes in the demand for beef to occur somewhat later than changes in business activity; and (3) to the prospective increase in the supply of meat.

The demand for feeder cattle in 1931 was below that of 1930, because: (1) cattle feeding operations were relatively unprofitable during the preceding year; (2) credit difficulties were encountered by feeders; and (3) the price of finished cattle during 1931 was low. Inspected shipments of stocker and feeder cattle from public stockyards during the first six months of the year were about 18 percent less than during the corresponding period in 1930. During the second half of the year, however, they were only 4 percent less. The eastern corn belt took on more than a normal proportion of the fall supply of feeder cattle, while the western corn belt, where feed crop production was smaller, took on fewer feeder cattle than usual. The low prices of corn and other feeds and the present low prices for feeder cattle will probably bring about an increase in the demand for feeder cattle during the spring of 1932. In mid-December of 1931 the prices for the lower grades of slaughter cattle, stockers, and feeders had reached the lowest level in more than twenty years.

In view of present price relationships involving cattle, feed crops, and competing agricultural enterprises, and the agricultural readjustments which are apparently under way in the corn-belt states, the upper trend in cattle numbers will probably continue during the next few years in spite of the present low level of cattle prices and the present limited demand for beef. With additional incentive for expansion, production will probably increase at a faster rate than it has during the last four years, since numbers of breeding stock are relatively large.

HOGS

After holding relatively steady for several years, the number of hogs in the United States increased sharply from 54.4 millions in 1931 to 59.5 millions on January 1, 1932. Of this total, 42.7 millions were in the corn-belt states. This represents an increase of 9 percent for the country as a whole, 10 percent for the eastern corn-belt states, and 12 percent for Illinois. This increase was the result of a moderate increase in the spring pig crop of 1931 and a large increase in the fall pig crop.

Market receipts during October, November, and December in 1931 were nearly 9 percent above those of 1930. The larger number of hogs on farms points to a continued heavier marketing during the remainder of the marketing year ending September 30, 1932, which is expected to give marketing receipts of about 47.5 millions compared with 43.6 millions for 1931. During February and March, 1932, marketings of hogs may be expected to continue relatively heavy as large numbers of 1931 spring pigs at heavy weights are reported held back on farms because of

HOG-CORN PRICE RATIO AT CHICAGO

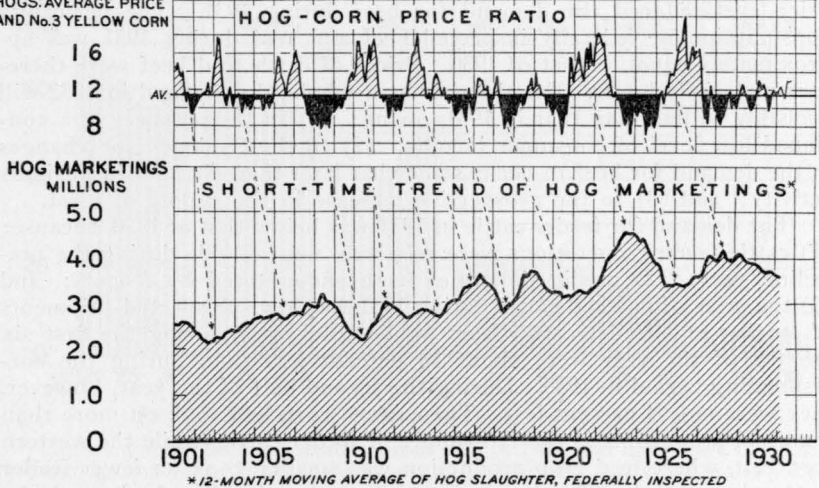
HOGS: AVERAGE PRICE
AND No. 3 YELLOW CORN

FIG. 8.—CORN-HOG RATIOS AND HOG MARKETINGS

This chart shows how the relation of the price of corn to the price of hogs creates the hog cycle. The upper part shows the corn-hog ratio as it fluctuates around the average. The lower part shows the changes in hog marketing with the seasonal variation taken out. A period when corn-hog ratios are above average causes an increase in hog marketing a year or two later; whereas, a period of ratios below average is followed by a decrease in marketing. Since 1927 the corn-hog ratio has fluctuated within rather narrow limits, and yearly receipts of hogs have been more uniform since that time. (*Bureau of Agricultural Economics, U. S. D. A.*)

bad roads and these will be moved to market at the first opportunity. Large marketings of fall pigs are also expected.

The December, 1931, pig survey, when adjusted to the usual spread between breeding intentions and actual farrowing, indicates for the entire country a probable 2-percent increase in number of sows to farrow in the spring of 1932 as compared with 1931. For the corn-belt states, however, a decrease of about 5 percent in number of sows farrowing is indicated, owing to a decrease in the western parts of this region where the corn crop was reduced by drouth. Low current hog prices may reduce indicated farrowing.

Because of heavy slaughter in the last three months of 1931, storage stocks of pork products on January 1, 1932, were more than 7 percent larger than a year earlier, but not greatly different from the 1927-1931 average for that date. Lard stocks were 2 percent less than the five-year average.

The decline in consumer demand for pork products in the United States which began early in 1930 continued thru 1931, but as a result of lower retail prices during the last three months of 1931, consumption of pork was larger than in the same period of the preceding year. Domestic

demand for pork during 1932 will depend in large measure upon developments in the business situation. In view of present business prospects, little improvement of consequence seems likely. The recent increase in hog production in deficit hog-producing areas, especially in the cotton belt, will probably result in greater local and farm slaughter, which will tend to reduce the demand for pork from commercial slaughter.

Total United States exports of all hog products during the 1930-31 marketing year were the smallest in more than thirty years. Continued small exports probably are due: (1) to continued large numbers of hogs in important European countries and the record supplies of pork and lard being produced in those countries; (2) to the absence of any indication of strengthened European buying power in the near future thru improved industrial conditions; and (3) to the abandonment of the gold standard by Great Britain and Denmark, which has intensified the competition from Denmark in the British pork trade. The foreign situation depends much upon the production from Denmark and Germany. In Denmark there is indication of a large continued production, but in Germany a decline is probable in view of the unfavorable ratio of hog prices to feed. The decline in prices of pork and lard in European markets during 1931 was even greater than in the United States.

Despite a reduction in slaughter supplies, hog prices during the marketing year of 1930-31 averaged about 25 percent lower than those of the previous marketing year. With the exception of slight seasonal advances, hog prices moved downward from October, 1930, thru January, 1932, the average Chicago price of \$3.93 a 100 pounds for the week ending January 23, 1932, being the lowest weekly price on that market for more than thirty years. Wholesale and retail prices of pork products also declined during 1931.

The corn-hog ratio (the number of bushels of corn that are equal to the value of 100 pounds of hogs), using Illinois farm prices, averaged 14.0 for 1931 and stood at 14.1 on January 15, 1932. The yearly ratio for the 21 years 1910-1930 averaged 12.4 bushels based on Illinois farm prices. Thus the present ratio for Illinois farmers is rather favorable; this is in marked contrast to the very unfavorable ratio which exists in the western part of the corn belt because of a short corn crop in that area.

Considering present market receipts, storage stocks, and prospective marketings, there is little prospect for better prices for pork products during the coming year except as they may be influenced by improved business conditions. For Illinois producers the price of corn and the size of the crop to be produced in 1932 will be important factors in the future of the hog situation. These cannot be forecast definitely at this time.

SHEEP AND WOOL

The numbers of sheep and lambs in the United States continued to increase in 1931. On January 1, 1932, the total number was 53.9 million head, an increase of 2 percent over January 1, 1931, and 49 percent over January 1, 1922. Numbers have increased continually from 1922. The lamb crop of 1931, the largest ever saved in this country, was 31.7 million

head, an increase of 8 percent over the 1930 crop. The number of sheep and lambs marketed from May to December, 1931, was 9 percent larger than for the same period in 1930. This increase was due to the number of lambs, for the number of sheep marketed was smaller during most of the period. Prices of old sheep were so low that returns to shippers were little more than expenses of shipment.

The large numbers of lambs now on feed indicate that market supplies will continue large thru the present feeding and marketing season ending the last of April. The supply for 1932-33, beginning May 1, will depend largely upon the size of the 1932 lamb crop. Feed conditions are generally favorable in most areas east of the Missouri river, and there is no reason to expect the lamb crop of 1932 to be smaller than that of 1931 in this area. In some sections of the western states, however, conditions have been unfavorable for a large lamb crop.

Reduced consumer income and the increased market supply of lambs have resulted in a sharp reduction in prices. The demand for lamb, however, has apparently been reduced less than the demand for beef and pork. Any improvement in demand will depend upon improved buying power of the consumer.

A very large production of wool in 1930 and still further expansion in 1931 resulted from a large carryover of old sheep. Production of shorn wool in 1931 was estimated as 25 million pounds greater than in 1930; pulled wool production was slightly larger. Stocks in this country on January 1, 1932, were smaller than a year ago, the consumption of domestic combing and clothing wools having increased about 70 million pounds during the first 11 months of 1931 over that of 1930. This increased consumption was due in part to revived popularity for wool dress goods and in part to low prices.

Imports of wool in 1931 were the lowest in thirty years. Supplies of wool in the United Kingdom, however, are unusually large, tho those in manufacturing countries of Continental Europe are probably not excessive.

Prices paid to farmers for wool dropped from 3 percent above the 1910-1914 base in December, 1930, to 28 percent below that base in December, 1931, but have been quite steady for some months. The margin of domestic over foreign prices has tended to narrow since the latter part of 1929, and during most of 1931 the domestic price has been below a free importing basis on most grades of wool. Some sharp declines and partial recoveries of prices abroad have not been fully reflected in domestic prices, and for that reason the margin has fluctuated rather widely.

Lamb production rather than wool production has been the most important source of income in the sheep industry. In previous periods when conditions were similar to those now existing, the first reaction was to reduce flocks. This was brought about largely by heavy marketing of lambs and keeping insufficient young stock to replace the losses of aged sheep. There is some indication that total numbers will be reduced slightly during the next year.

For Illinois farmers the early lamb continues to be the best prospect. Growers whose lambs do not command better than average prices need to change some of their production practices.

POULTRY AND EGGS

The number of hens and pullets in farm flocks on January 1, 1932, was about 5 percent less than a year ago and about 11 percent less than two years ago. Because of mild winter weather and cheap feed, egg production per hen has been very high. This has resulted in a decreased movement of eggs out of storage. The combined effect of these factors and the decline in the general price-level has been to force the Illinois farm price of eggs to the lowest January level in the 23-year record of farm prices. Only a long period of very cold weather could bring a pronounced rise in egg prices this late in the season.

Storage stocks of shell eggs on January 1, 1932, were 22 percent below the 1931 record figure but they were 23 percent above the 1927-1931 average. Stocks of frozen eggs on the same date were 5 percent below the 1931 figure and 45 percent above the five-year average. Egg storage operations have been very unprofitable during the last two seasons, and this will undoubtedly curtail the demand for eggs for storage during the early part of the 1932 season. All these factors point to continued low egg prices during the first few months of 1932.

Thus the tendency toward increased poultry production in 1932 as a result of the relatively profitable position of farm poultry flocks in 1931 is being offset by present low egg prices. There is nothing to indicate a heavy demand for chicks during the early part of the 1932 hatching season.

Storage stocks of poultry, excluding turkeys, on January 1, 1932, were 6 percent above what they were a year ago but 7 percent under the five-year average. Stocks of fowl, however, were 28 percent less than in 1931 and 27 percent below the five-year average. The farm price of hens has held up well in comparison with the prices of other farm products; in view of the present low storage stocks of fowl and the reduced number of hens on farms this relation might be expected to continue thru much of 1932. If the present low prices of eggs result in heavy marketings of hens and consequent lower prices, some improvement in both fowl and egg prices might be expected during the late spring or early summer of 1932.

Storage stocks of broilers on January 1, 1932, were about 6 percent above those of a year ago but 20 percent under the five-year average. Since broilers are in the class of luxury foods, there is little prospect for any early marked improvement in the present low prices unless general business conditions improve.

The decreased number of hens on farms and in commercial flocks on the Pacific coast, the outlook for a smaller production of eggs in 1932, the probability of a lighter into-storage movement of eggs, and the prospect for a reduced number of early chicks, as indicated by recent cancellation of orders for baby chicks, all point to a relatively favorable outlook for the producer who is in a position to raise early chicks so as to have early roasters and early laying pullets. Producers may well watch the trend in hatchings as reported monthly by the U. S. Department of Agriculture, but the present outlook is for farm poultry flocks to be relatively profitable during the last half of 1932.

As pointed out last year, careful selection, close culling, and efficient

management may well be used in an effort to produce poultry and eggs of high quality, since in an unfavorable market situation the greatest disadvantage falls on low-quality products.

Turkeys. The upward trend in turkey production seems likely to continue because of the increased number and size of specialized flocks, improved methods of production and lowered costs, and the tendency for turkeys to be consumed over a considerable part of the year rather than just at the holiday season.

Stocks of frozen turkeys on January 1, 1932, amounted to 10,300,000 pounds. This was more than double the amount in storage a year ago but only 14 percent above the five-year average, and represented only about 5 percent of the total domestic production.

Because of low feed costs and because the farm price of turkeys held up much better than the farm price of most other products, the outcome of the 1931 turkey season was favorable to producers. This may tend to stimulate excessive turkey production in 1932, with resultant disappointment to many beginners as well as unsatisfactory returns to those already producing turkeys.

Many Illinois producers have been favored by being in areas of local shortage of turkeys. Any marked increase in local production may change this situation.

OUTLOOK FOR FRUITS

APPLES

The outlook for the apple industry is much the same as last year. The trend of commercial production in the United States has been about even or slightly upward during the last ten years and may increase slightly during the next five-year period. Most of the increase can be expected in the North Central, Middle Atlantic, and New England states. Production in the Mountain and Pacific states is expected to decline slightly.

The immediate outlook for apples is that of continued reduced demand, a probable reduction in the export trade, and severe competition with other fruits. Unusually high yields such as occurred in 1931 are not anticipated for 1932. With normal yields some relief may be expected from the disastrously low prices of 1931; but unless the crop is exceedingly short, high prices cannot reasonably be expected during the next crop season.

On the basis of reported tree acreages, Illinois will show some increase in apple production during the next few years in such varieties as Transparent, Duchess, Golden Delicious, Red Delicious, Staymen, Winesap, and Jonathan. Decreased production is expected with Ben Davis, Gano, and York.

No substantial increase in the acreage of apple trees in Illinois can be justified under present conditions except on a few superior sites or on locations where practically all the fruit can be disposed of to advantage locally.

PEACHES

A survey of the important peach-producing states made in the fall of 1931 showed that only three—Tennessee, Colorado, and Utah—had not

yet reached their production peaks. Most of the other important states showed distinct signs of decline, and many small growers were neglecting their orchards.

The 1931 season was a severe disappointment to Illinois peach growers. Prices below cost of production prevailed during most of the Illinois shipping season, and much of the fruit marketed returned little more than the actual costs of harvesting and marketing. This situation, following the total peach crop failure of 1930, may cause the neglect and abandonment of some Illinois orchards in 1932.

Illinois shipments will continue to meet heavy supplies from Arkansas, Tennessee, and the Carolinas, but some relief is expected from the demoralizing conditions of 1931.

In view of the indicated decline in United States peach production, some increase in planting may be justified during the next few years. Such plantings should be moderate, at a uniform rate, and on the best sites available in southern Illinois. They should be attempted only by persons well able to finance such enterprises.

STRAWBERRIES

Estimates of commercial strawberry acreages to be harvested in 1932 indicate a 13-percent increase in the early states, a 43-percent increase in the second early states, and a 33-percent increase in the intermediate states, of which group the southern half of Illinois is a part. With average yields in these areas, heavy supplies may be expected in the carlot markets before and during the Illinois shipping season. Under such conditions, prices received by growers in the intermediate states are apt to be materially lower than those received in 1931. Since increases in bearing acreage affect supplies during the two or three years following, any increase in commercial plantings in these areas should be made with the expectation of relatively low prices during 1933 and 1934.

Increased plantings in Illinois should be confined largely to home gardens and to areas where local markets offer profitable outlets. Varieties should be selected that are well adapted to the markets for which they are to be grown.

GRAPES

The present outlook in the grape industry is not favorable to further planting in Illinois except to maintain bearing acreages where marketing conditions make satisfactory prices possible. The present supply of grapes from California and from eastern producing sections will probably exceed the demand for the next few years.

Home fruit plantations offer an opportunity for plantings of small quantities of grapes, strawberries, raspberries, and bush fruits on Illinois farms. High-quality varieties should be selected for this purpose.

RASPBERRIES

Acreages of red raspberries have continued to increase at a moderate rate in Illinois and the surrounding states. Altho prices received during 1931 were materially less than in preceding years, raspberry production

continued to be a profitable enterprise for Illinois growers. Large plantings in Arkansas and other southern states may act as depressing influences on the markets for Illinois raspberries, but, at present, moderate increases in commercial plantings of red raspberries appear to be justified.

Good local demand and plentiful supplies of clean nursery stocks suggest that black raspberry production may be undertaken profitably in some parts of the state.

NUTS

Plantings of black walnuts and chestnuts may be undertaken profitably in certain parts of Illinois, particularly where they are made to fit in with a reforestation program. Such varieties as Stabler, Ohio, and Thomas black walnuts and Boone and Fuller chestnuts deserve consideration. Some of the northern pecan varieties which do well in this section and which are of better quality than the southern varieties may be planted for home use and for restricted sale where quality is appreciated.

OUTLOOK FOR VEGETABLES

The 1931 decline in vegetable prices was not so sharp as that of field crops in general. Prices of certain southern-grown vegetables shipped to northern markets during the winter months, have been relatively higher than prices of other commodities, owing to short supplies, but these prices should not be taken as indicative of the probable prices of the same commodities when the Illinois product of the same kind is ready for market next summer.

Plantings of vegetables in Illinois in 1932 should probably be determined largely by the demands of local markets or markets within trucking distance. Under present conditions, growers located near their markets have greater advantage than usual, for with food prices lower and freight rates relatively high, the margin between terminal market prices and shipping costs has been materially reduced for the long-distance shipper.

CABBAGE AND ONIONS

Because of the very low prices for cabbage grown in the intermediate group of states (including Illinois) in 1931, it is likely that there will be a reduced acreage in these states in 1932. This would tend to improve prices. Persons who have been accustomed to grow early cabbage in Illinois will probably find it advantageous to make plantings in accord with the demands of their usual market outlet.

Because of reduced acreage and unfavorable weather conditions in 1931, the crop of late onions was only a little over half as large as in 1930, and as a result prices of onions were considerably higher than in 1930. In a year immediately following a year of good onion prices there is a tendency toward increased plantings. If weather conditions are favorable for large yields, the increased acreage is almost certain to oversupply the market to such an extent that prices are materially reduced. In 1932 it will probably be wiser to make conservative rather than heavy plantings of late-crop onions. The 1932 acreage of late-crop onions probably should not exceed the 1931 acreage.

TOMATOES

The acreage of tomatoes grown in the intermediate and late-crop states for marketing fresh in 1931 was somewhat larger than in 1930. Because of unfavorable weather in some sections, total production was no larger than in 1930. Prices, however, averaged the lowest in years, even tho they were high during a short period of unusually light shipments from some sections.

Illinois tomatoes for shipment meet severe competition from other states. A high-quality product and pack for special markets would seem most likely to yield a profit. Local markets should be supplied with home-grown products thruout the normal season.

MELONS

Commercial plantings of watermelons in Illinois in 1932 should be on a conservative basis and confined to areas especially adapted to this crop. There is special need for improvement in the methods of marketing Illinois watermelons.

The largest acreage of watermelons on record was planted in 1931, and in spite of favorable weather conditions for consumption of this product, large quantities of good melons were left unharvested because of unfavorable prices. The acreage in the late states (the group which includes Illinois) was 19 percent larger than in 1930, and the total production from these states was 22 percent larger than ever before. Prices were 30 percent lower than in 1930.

The acreage of muskmelons in the United States in 1931 was 22 percent higher than the three-year average for 1928-1930. The increased acreage was largely in the earlier producing areas and was not marked in the late states. However, the prices to growers in the late states dropped 12 percent below the 1928-1930 average. At some points in Illinois high-quality muskmelons were produced for local markets with a good degree of success. This product, when of high quality, lends itself well to sale at roadside and other local markets.

SWEET POTATOES

Because of the low price of cotton, farmers in the cotton belt greatly increased their acreage of sweet potatoes in 1931. Altho unfavorable growing conditions resulted in low yields, prices at which the crop was moving from the farms in December were the lowest for that month in thirty years. Even at that, the prices were not unfavorable compared with those being received for other farm products of importance in the South, and it is likely that the acreage of sweet potatoes in the Southern states will be still further increased in 1932. On account of this expected competition from the South, the acreage in the important commercial sweet-potato states of the East (Virginia, Delaware, Maryland, and New Jersey) is expected to be reduced.

In view of the entire situation, it is probable that the normal acreage of sweet potatoes might well be planted in the commercial producing areas of Illinois.

HOME GARDENS

Home gardens on Illinois farms were given more attention in 1931 than in any previous year. They were an important source of food and helped to reduce the cash outlay for food for many farm families. An increase in the number and improvement in the type of farm gardens should be made in 1932. The long-row farm garden arranged for horse cultivation is especially desirable under Illinois conditions.

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