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D. P. TRENT, Director

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AGRICULTURAL
OUTLOOK FOR OKLAHOMA

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By

J. T. Sanders, P. H. Stephens, O. W. Herrmann,
T. S. Thorfinnson, J. F. Page.

PURPOSE

The purpose of the Agricultural Outlook for Oklahoma is to bring together in convenient form the most reliable facts available concerning agricultural prospects together with an unbiased interpretation of the most probable effects. No forecast of prices is attempted; rather, existing conditions, tendencies, and trends are made known.

The individual farmer in making use of this outlook will of necessity be guided largely by local conditions, markets, and the alternative opportunities that present themselves. The application of the Outlook to a particular farm must be made by the farmer himself.

The major problem of the individual farmer is efficient production. Fitting the production of farm products to the market demands is, however, one of the important problems of the farming industry. The information in this outlook is presented for the purpose of aiding in the solution of this problem of adjusting agricultural production to consumer requirements with the hope that the farmers of Oklahoma may in part be protected from glutted and unprofitable markets of particular commodities and that the consuming public may not be unduly penalized by the high prices of scarcity. Both producer and consumer would profit by a more stabilized farm production.

Special recognition is due the staff of the Bureau of Agricultural Economics of the United States Department of Agriculture from whom much of the material for this report was obtained. Appreciation is also extended to other departments of the School of Agriculture and the Extension Division of the Oklahoma Agricultural and Mechanical College for assistance.

GENERAL AGRICULTURAL SITUATION

The outlook for agriculture in 1929 is generally favorable. Industrial activity will apparently continue on a high level at least during the first half of the year. Filling the "full dinner pail" makes the prospect of a good demand for food products an excellent one.

Over-production of particular commodities is a constant menace facing the agricultural industry. Such over-production is likely to be regional in its effects rather than nationwide.

The outlook for livestock prices is better than for crop prices. The demand for meats is good and the supply of breeding stock of most classes of livestock is short. Our present lack of balance between crop and livestock production may be attributed to the relatively unfavorable prices received for livestock, particularly cattle and hogs, a few years ago, and to the difficulty of re-establishing livestock enterprises once the supply of breeding stock is depleted.

The outlook for the feed grains is generally a continuation of prices about on par with those of the past year barring excessive increases in production due to yields larger than normal. The situation with wheat probably is not so favorable.

BUSINESS AND FINANCIAL CONDITIONS

General business conditions have an important part in determining the potential demand for agricultural products. Some recession in the present high level business activity before the close of the year is forecasted by several leading authorities.

The speculative stock market transactions of the past year have been a factor in bringing about higher interest rates in certain banking centers. A violent reaction in the stock market might affect business conditions unfavorably for a time.

The outlook in certain of our basic industries is good. Steel and auto production are expected to continue at their present high levels for at least six months. Some slackening in building activity may take place, though increased road and public utility construction may more than off-set any decline in this direction. Railroads are anticipating another year of large freight tonnage. Incidentally the Southwestern states last year showed the largest increase in freight car loadings of any of the seven freight districts in the United States; 4.1 million cars of revenue freight were loaded in this district in 1928 as compared with 3.9 million cars in 1927. Most authorities believe that the incoming national administration will have an encouraging effect upon business, particularly that affected by foreign trade. Ample credit is available for present business needs.

The long time outlook for the general price level of all commodities is for a gradual decline. It now stands at about 150 per cent of pre-war. The stabilization of the currencies of France, Italy, Germany, and other countries has caused an outflow of gold from the United States. During 1928 the United States had a net loss of 272 million dollars or 6 per cent in its gold supply. The ratio of reserves to the combined note and deposit liabilities of the Federal Reserve Banks decline from 78.5 per cent on August 27, 1927, to 69.5 per cent on August 22, 1928. The general growth of business and the declining output of gold mines makes for a long time outlook of dearer money and lower commodity prices. Such a result would increase the real value of credit loans and penalize the owner of physical property.

The gradual decline of the general price level may be a factor in ultimately bringing about a relationship between the prices of agricultural and industrial commodities more favorable to the farming interests of the country. The purchasing power of farm products in terms of goods bought has raised from the low point of 75 in 1921 to 90 in 1928.—P. H. Stephens.

COTTON

Conditions do not warrant an expansion of the cotton acreage in the United States. Oklahoma farmers, especially those in the Southwest whose costs are low and whose yields have been comparatively high for the past few years, should make little change with regard to acreage planted. In the eastern part of the state, however, where costs are high and boll weevil damage liable to be great, cotton for next year is a questionable enterprise.

In 1928, cotton was planted on about 46.9 million acres in the United States, an increase of about 11 per cent over the acreage planted in 1927. The fairly satisfactory prices of this past season came in spite of the large acreage and because of the low per acre yield and small carryover from the 1927 crop. The net income per acre of cotton has been considerably below that of last year particularly in the southeastern cotton states where costs are high.

The total acreage and yield per acre of the American crop has varied considerably in the past three years, both in the United States and in Oklahoma. A review of these years may throw some light on next year's prospects.

In 1926, a year of extremely low prices, there were 48.7 million acres of cotton planted, the largest acreage ever planted in the United States. The yield per acre, 182.6 pounds, was extremely high also, and the result was a crop of approximately 18 million bales. A carryover of 5.5 million bales brought the supply of American cotton on the world's market up to 23½ million bales. Even with the increased demand, which resulted from low prices, the average price on 10 designated spot markets was 14.4 cents.

In 1927 the acreage fell off, due to the low prices of the previous year, the Mississippi flood, and various other causes. A total of 40.1 million acres was harvested. The yield per acre in 1927 was but 154 pounds, and the total production was about 12.8 million bales as compared with 18 million the year before. The carryover, however, was 7.8 million bales, which made a total supply of American cotton last year of 20.6 million bales. Large stocks had been built up in foreign markets the year before at low prices, and the domestic consumption declined in the last half of the 1927-28 season. The world consumption of American cotton, however, declined only about 400,000 bales in spite of an average middling spot price on 10 designated markets of 19.7 cents.

In 1928 the total plantings reached 46.9 million acres, only four per cent below that of the disastrous year of 1926. Losses due to boll weevil were exceptionally heavy and the weather conditions on the whole unsatisfactory: the result was a yield per acre for the United States of 151.8 pounds resulting in a production of about 14.4 million bales. The carryover was smaller than usual, 5.1 million bales, which makes a total supply of American cotton for this year of 19.5 million bales. This was over a million bales below last year's supply. The middling spot price thus far for the season has been 18.5 cents.

Demand factors this past season have been quite unsatisfactory. During August and September of the past year, the domestic consumption was low, but during October, November, and December it compared very favorably with that of the preceding year. For the period ending January 25, 1929, however, domestic consumption was slightly more than 300 thousand bales below the same period of last year.

Exports of American cotton for the period of August 1, 1928, to January 25, 1929, showed an increase of slightly more than 1 million bales over that for the same period last year and slightly above that of the four year average. Up to January 25, 1929, exports amounted to 5.5 million bales as compared with 4.5 million bales for the corresponding period last year. Mill takings since August have been about 9.1 million bales, as compared with 8.9 million for last year and 9.5 million for 1926.

Stocks of American cotton in European ports were considerably below that of last year. On December, 1927, there were 1.6 million bales in European ports and 1,3 million in 1928. Stocks of Egyptian cotton in Alexandria were slightly above those of last year, and the stocks of Indian cotton were much in excess of those of last year. Stocks of Indian cotton in Bombay in December of 1928, were reported to be 719,000 bales as compared with 329,000 bales for December, 1927.

In 1928, Oklahoma showed a net increase, after abandonment, of 100,000 acres over 1927. The ten year average (1917-1926) production per acre for Oklahoma was 151 pounds. The December 1, 1928, report by the United States Department of Agriculture placed the per acre yield for Oklahoma this past season at 133 pounds, which is 18 pounds below the 10 year average, and five pounds below the yield of 138 pounds per acre last year, as compared with 181 pounds in 1926, 155 pounds in 1925, and 187 pounds in 1924.

Early investigations indicate less weevil damage in Oklahoma for this next season. The following paragraphs, quoted from United States Department of Agriculture publications point out the situation clearly with regard to production, and also boll weevil damage in the United States as a whole:

"In 1928 there was considerable crop damage from boll weevil. Weevil emergence is influenced significantly by winter weather conditions and the extent of damage depends largely upon the weather during the spring and summer. During the past fall, boll weevils were as numerous and even more widely distributed, than in the fall of 1927. So far this winter the weather in the cotton belt has been relatively mild. During the past six years the yield of cotton has averaged 157.3 pounds per acre. In 1923, weevil damage was severe and the yield per acre was 130.6. In 1926 the weevil damage was slight and the weather conditions during the fall were exceptionally favorable for maturing the crop. The yield that year was 182.6 pounds per acre. The yield of 151.8 pounds per acre obtained in 1928 was 3 per cent below the average for the last six years."

The quality of the Oklahoma crop, particularly with regard to staple is much below that of previous years. Oklahoma is losing its reputation for good cotton very rapidly it seems. Because the farmer is in a position to get paid on the basis of grade and staple, through improved local markets and particularly through his own market organizations, it would be well for him to look carefully to the kind of seed he plants as well as to the number of acres. The trend toward half and half cotton has lowered the general quality level and is bringing more and more American cotton into competition with the short staple cotton from India and China. The farmer should make a definite effort in future years to plant seed that will produce a fiber which the market demands.—O. W. Herrmann.

W H E A T

The present winter wheat acreage of the United States is sufficiently large to produce, with normal yields, about three to four per cent more winter wheat next year than has been produced annually the past five years. Therefore, an export basis is likely next year and the world's wheat situation in all likelihood will dominate the price of Oklahoma wheat. There is now no outstanding evidence of an improved market for Oklahoma wheat for this crop over that which was realized for the 1928 crop.

The world's acreage of wheat outside China and Russia during 1928 was approximately 18 per cent above the average of 1909-1913 and about seven per cent above the average acreage of 1921-1925. At the same time, the estimated world's population outside Russia and China had increased in 1928 to 11 per cent above the average of 1909-1913 and to 3.5 per cent above the

average of 1921-1925. The per capita production of wheat outside China and Russia averaged 2.46 bushels from 1909-1913; 2.55 bushels from 1921 to 1925; and 2.82 in 1928. In other words, the world's per capita production of wheat outside China and Russia had increased in 1928 to 115 per cent of the average of 1909-1913 and 110 per cent of that for 1921 to 1925.

The world's visible supply of wheat is about five per cent greater this year than it was last year. This was due to a somewhat larger carryover than that of last year, a larger acreage, and a higher yield all three combining in the increase. Figures and facts on the possible acreage for next year are of the most fragmentary nature but indicate the possibility of as large acreage next year as that of 1928. All evidence clearly points to the fact that the world is facing a gradual increase in its per capita wheat production for several years to come.

On the demand side there is unmistakable evidence of a tendency to increase the consumption of wheat both in Europe and in the Orient. To what extent this tendency will continue and the extent to which it will offset the influence of increased per capita production outside of the Orient no one can say. On the other hand, the per capita consumption of wheat, in the United States, has shown a marked tendency to decline under the amount consumed pre-war. Various causes for this decreased consumption are given, among which are our great increases in consumption of sweets and vegetables.

Canada had in 1928 about 2½ times as many acres of wheat as it had pre-war. Argentina has increased consistently its acreage from 14 million in 1921 to 21 million acres in 1928, the pre-war acreage being around 16 million. Both Argentina and Canada have much virgin land on which they can expand their wheat acreage. Europe has only this year attained its pre-war acreage of wheat. Russia has not been a factor of influence in the world wheat market since pre-war days, and there is no indication that this condition in Russia will likely change materially in the near future.

No class of wheat in the United States clearly faces the probable increased competition of the world's wheat industry more than does the hard red winter wheat. This class of wheat is almost continuously on an export basis. Putting all these facts together—certainly Oklahoma wheat farmers seem to face an increasing need of reducing their costs of production this year and in the years to come, if they are to continue to rely on wheat as their main source of income.

The long time prospects for Oklahoma wheat producers indicate a probability of lower price levels than those of the past few years, barring Federal legislation affecting domestic prices. What of the prospects for the coming year? In so far as they can be seen now, the facts do not indicate a likelihood of a change for the better over that of the past year unless this change be brought about by a world yield that is below normal. There is a possibility of a slightly smaller acreage of wheat in Canada this year than last year, due to low prevailing level of prices and poor grade wheat. Fragmentary facts on European acreage sown last fall indicate no reduction in acreage, rather they point to the likelihood of a slight increase. Argentina, which at present has prospects for a good corn production, may possibly not alter its coming year's acreage of wheat, although during 1928 wheat acreage was increased five per cent, in spite of a good corn crop the previous year.

From 1921 to 1925 the average yield of wheat in the world outside China and Russia was 14.6 bushels per acre; the average from 1903-13 was 14.5 bushels; and the average for the past three years was 15.2 bushels. Whether this increased average yield will continue into another year or not is not possible to say. But it is a well known fact that the average yields of wheat for the world are on the increase and that they show stability to a remarkable extent as compared with yields of other crops. The reason for this stability is found mainly in the fact that wheat is grown in all parts of the world, and failures in some sections normally tend to be off-set by increased production in other sections. Therefore, we can reasonably expect no serious change in the world wheat trends next year as a result of yields. This does not mean that very low yields here—sufficiently low to threaten an import, thus

making wheat tariff effective—would not affect our farm price. But we can not reasonably expect hard red winter wheat to be on an import basis next year; nor hope for world yields to change our wheat situation for the better over that which prevailed in 1928.—J. T. Sanders.

FEED GRAINS AND FORAGE

Safe farming demands that an adequate supply of feed and forage be produced to maintain the livestock kept on the farm. Expansion of the legume hay acreage is advisable.

Expansion in the livestock enterprises calls for the production of more grain and forage. Profits on the livestock now maintained in many instances are limited by insufficient feed of the proper kinds. An acute feed shortage now exists in some localities in the southwestern part of the state.

There is a pressing need for a considerable expansion of the acreage of legumes hays in Oklahoma. Alfalfa hay is selling at from two to five dollars per ton higher than a year ago. Year in and year out alfalfa pays as high returns per hour of labor spent upon its production as any of the common crops. Where soil and moisture conditions are favorable an increase in the acreage of alfalfa seems advisable. The same is true of cowpeas, soybeans, and sweet clover.

The acreage of the alfalfa in the three most important producing mid-western states, Oklahoma, Kansas, and Nebraska has decreased 23 per cent since 1920. The production of alfalfa for the market is a likely possibility where natural conditions permit. Continued high prices for alfalfa hay are in prospect.

The acreage of corn in Oklahoma has been declining for a period of years. Corn yields have not been satisfactory in many instances, particularly on rolling lands where much of the original fertility has been lost through erosion. Corn production is tending to concentrate in the more humid sections of the state and on the bottom lands. The grain sorghums have taken the place of part of the acreage formerly occupied by corn. This substitution appears likely to continue.

Figures show that over a period of years the gross returns for barley are about two dollars per acre higher than for oats. Farmers making a choice between these two feed crops would do well to bear this fact in mind. Except in the case of work horses, barley is perhaps the more desirable for most feeding purposes.

Local demands in some instances make the production of some feed stuff for the market attractive, but as a rule the most profitable market for feed is on one's own farm. Prospective livestock prices justify close attention to this side of the farm business. Sound livestock farming demands that an adequate supply of both grain and forage of good quality be produced. Livestock produced on scanty rations or shipped-in feed are not generally profitable.

The market for prairie hay is unsatisfactory and will likely continue so. Many wild hay meadows could be more profitably used as cattle pasture.

For the United States as a whole there is a prospect of lower feed grain and non-legume hay prices in 1929. The demand for feeds may be materially lessened because of the smaller number of horses and hogs. Oklahoma farmers that produce feeds for sale above state market demands may expect increased competition from other surplus producing areas.—P. H. Stephens.

BROOMCORN

A slight increase in acreage of broomcorn in Oklahoma seems justified in the light of prospective commercial requirements.

The 1928 Oklahoma acreage and yield per acre were practically the same as in 1927. The price in Oklahoma was \$9⁵ per ton in 1927, and \$111 in 1928, even though the production in the United States increased from 38,600 to 45,500 in 1928. The acreage in the United States was 15% below the aver-

age for the last five years, but the yield per acre was 361 pounds, which is considerably above normal. With average yields, acreage can be increased somewhat.

The United States Department of Agriculture gives some indication as to the demand for the next year: "There are no indications that domestic and Canadian requirements for broomcorn during the coming season will be larger than in 1928." A ten per cent increase in acreage in the United States with normal yield will meet these requirements.

The normal carryover for broomcorn is about 25,000 tons. This last year the carryover was 26,000 tons which, added to the 1928 production brought the total available broomcorn supply on the market to 71,000 tons. Indications are that, with no increase in commercial consumption, about the same amount will be carried over into the next season.

Farmers outside the established broomcorn districts will find difficulty in disposing of their crops unless they have a good local market. It takes much experience and some special equipment to produce a broomcorn brush of high quality. Unless the farmer can conform to the requirements of the trade, broomcorn is a hazardous enterprise.—O. W. Herrmann.

POTATOES

Last year's experience has caused the keenest possible interest in this year's potato prospects; and the gist of the prospects is that this year's outlook is none too bright for the commercial producer if past experiences work out as they usually do. To the men producing potatoes where there is not a local surplus, the situation is not so unpromising.

The unpromising side of the Oklahoma potato outlook for next year centers around the fact that a very large quantity of potatoes is held in storage, and the almost certain fact that storage holdings are an outstanding determinant of what Oklahoma farmers normally get for their following crop. Only once since 1919 has there been as large a carry-over of merchantable stocks of potatoes in the United States as there is this year. This was in 1922 when there were 133 million bushels carry-over as compared with 131 million this year. A large carry-over has a very depressing influence on prices the following year.

There has been, with but few exceptions, since 1910 an unusually close relation between the January 15 price of potatoes for the United States as a whole, and the average price that Oklahoma farmers have received for their following crop. Normally Oklahoma farmers get about 50 per cent more for their crop than the United States January 15 price. Although the January price has not been released yet, it will not be far above 60 cents. Therefore, if past normal relations between January United States price and the coming Oklahoma farm price exists this year, Oklahoma commercial producers can not reasonably hope for a price much above \$1.00 per bushel, with slight chances of getting above \$1.25 per bushel.

This should not be taken as a literal prediction that potato prices will be around these figures, but it should be taken as a probability based on the above given facts. Should this year's second early crop yield, both in Oklahoma and competing states, be very low, and should prospects for the late crop be very low, because of greatly reduced acreage or poor yield prospects, Oklahoma farmers could get very fancy prices. On the other hand, the reverse in high yields and normal acreage could heap a disaster on the state possibly as bad as last year's potato situation.

The reason why the January United States farm price is so important in determining Oklahoma's price for the following year's crop may be easily seen. We sell in what is known as the second early crop market in competition with South and North Carolina, Virginia, with its large Eastern shore crop, Tennessee and Arkansas.

But these are not our only competitors. Most of the winter storage

holdings from North Dakota and Minnesota and other Northern heavy producing states is put on the market in March, April, and May, directly preceding our heavy movement in June and July. Hence these potatoes tend to drag over into our market season. Since the "fancy new potato" demand has largely died with the Florida and South Texas market, we must sell, not "fancy new potatoes" but just "plain spuds" with practically no inclination on the part of the market to pay us a premium over storage potatoes.

The national government has compiled figures showing that farmers in 35 of the leading potato states intend to cut their acreage nearly nine per cent this year under last year's acreage, which with normal yields would mean a production of about 400 million bushels. This condition, if it occurs, will very largely give us another year of unprofitable potato prices.

On the other hand, Oklahoma farmers in the past have shown themselves to be extremely sensitive to potato profitableness or unprofitableness. A year of low prices normally since 1919 has caused them to cut acreage considerably—usually about 1000 acres for the state as a whole for each \$1.66 decline in the purchasing power per acre from that of the preceding year. Furthermore, profitable cotton the preceding year causes marked cuts in acreage of potatoes. Since 1910, Oklahoma potato farmers have tended to reduce their acreage of potatoes by 750 acres for each increase of \$1.00 per acre in cotton value the previous year. Last year cotton value per acre was higher in the potato belt than it had been in the past three or four years. Therefore last year's fair cotton returns and low potato returns will both tend to reduce the potato acreage this year. If normal results occur from the influence of low potato returns, we could expect less than 30,000 acres planted in the state. In addition, if the influence of the cotton situation is normal we might expect an acreage of slightly more than 30,000. In 1928 we had 63,000 acres and a normal acreage is about 40,000.

No one can predict what the cut will be with both last year's low potato prices and higher cotton returns working for reduction of acreage. It is conceivable that acreage and yield might combine to give us a condition where we would have no surplus potatoes. This would make local prices based on central market quotations plus freight rather than based on central market price less freight as is normal.

The situation cautions the commercial producer against expecting much, if any, profit from his potatoes if normal conditions prevail. But the small producer for local demand where surpluses do not exist may realize a fair though very probably not an attractive return.—J. T. Sanders.

SWEET POTATOES

There are many uncertainties in the sweet potato prospects for Oklahoma in the year 1929, but the probabilities are for a better year ahead than that which was experienced in 1928, although these prospects do not justify material increases for the coming year by commercial producers. Farmers producing for local markets where surplus sweet potatoes are not grown, and for home consumption may safely plan to raise sufficient potatoes to supply these demands. Last year's unsatisfactory sweet potato situation in Oklahoma was due mainly to depressed prices of Irish potatoes and not to a more than normal production of sweet potatoes.

The year 1928 was a most unusual year for sweet potato growers in Oklahoma. The total Oklahoma production in 1928 of 1.8 million bushels, the state's acreage of 20,000 and the yield of 89 bushels per acre, all three were below normal. Production had not been as low as last year's since 1919 except for the year 1924. Yields likewise were lower last year than the average yields from 1921 to 1927, inclusive. Notwithstanding this lower production, the price of sweet potatoes in Oklahoma was very unsatisfactory to producers. The average Oklahoma farm price December 1 was given by the United States Department of Agriculture as 95 cents, compared

with 80 cents in 1927, which was the lowest price received by Oklahoma producers of sweet potatoes on December 1, since 1910. Only three times since 1910 has the December 1 price been lower than it was in December, 1928.

A price around \$1.50 would be necessary to bring Oklahoma sweet potatoes to approximately their pre-war purchasing power. The weight of the evidence for 1929 indicates that sweet potato prices in commercial surplus producing areas have very little chance to rise to this price during the coming 12 months.

The peculiarity of the sweet potato price situation of Oklahoma during 1928 is explained partly by the fact that there is a fairly close degree of relationship between the price of sweet potatoes and Irish potatoes in Oklahoma. When Irish potatoes are extremely low, there is a tendency for sweet potatoes to be depressed unduly as related to normal prices for given amounts produced. Last year was the most disastrous year for Irish potato producers in the history of the state. Since 1910, the normal relation between sweet and Irish potato prices has been that for each \$1.00 decline of Irish potato prices there has been a tendency for sweet potato prices to decline from 50 to 60 cents per bushel. It is believed, therefore, that the Irish potato situation in the state last year had a serious depressing influence on the price of Oklahoma sweet potatoes. This possibly explains the unusual situation of a less than normal production of sweet potatoes with a decidedly low price prevailing.

If we are to expect the price of Irish potatoes to have a normal depressing influence on the price of sweet potatoes during the coming year, we shall very likely get a comparatively low price for our sweet potatoes. There is a very large carryover of Irish potatoes in the United States from last year's record breaking crop. This carryover has a seriously depressing influence on the price received for Oklahoma Irish potatoes. If normal conditions prevail as a result of these storage potatoes, the price of Irish potatoes in the state next year should be around \$1.00 per bushel with comparatively small chance for \$1.25 per bushel. With such prices of Irish potatoes prevailing, the sweet potato price would normally be not far from \$1.00 per bushel. These statements about prices for the coming year are not intended as predictions, but are statements relative to normal past relationships between the supply of Irish and sweet potatoes in the state and the relationships that have existed between the price of the two kinds of potatoes.

The comparatively low price of sweet potatoes last year, together with low yields gave sweet potato growers a very unsatisfactory return. This should have a depressing influence on the acreage planted to sweet potatoes during the coming year. Likewise, comparatively profitable cotton returns in eastern Oklahoma will tend to decrease the acreage planted to sweet potatoes by farmers. The non-commercial sweet potato producer who supplies only local markets, may possibly find a profitable return in sweet potatoes for the coming year. Certainly no farmer who normally produces his own supply should fail to do so the coming year. If the commercial grower of both Irish and sweet potatoes should fail to plant sufficient acreage to produce a surplus, the price in local deficit markets might possibly be based on the price at out-of-state markets, plus freight rather than the normal price situation which is the out-of-state markets less freight.—J. T. Sanders.

PEANUTS

Available facts would seem to indicate that Oklahoma farmers should not expand the acreage of peanuts in 1929 over that of 1928.

.....The total production of peanuts in the United States in 1928 was 6.2 per cent less than the quantity produced in 1927, and the price per pound on December 1, 1928, was almost 15 per cent greater than that for the corresponding date in 1927. The total production of peanuts in Oklahoma in 1928 was more than double the amount produced in 1927; while the price per pound on December 1, 1928, was 54 per cent greater than that for the corresponding date of 1927. It must be borne in mind, however, that due to damage by the

boll weevil the Oklahoma acreage of peanuts increased from 8,000 acres in 1926 to 20,000 acres in 1927, and 38,000 acres in 1928.

Production last year for the Southwestern States was about one-third greater than that of 1927, and the crop has rapidly moved out of the hands of the growers at the higher price, due to the fact that the quality of peanuts grown was superior to that grown in the Southeastern States. However, the growers of Oklahoma cannot expect every season to have an advantage in price due to superior quality over that of the peanuts produced in the Southeastern States. It should be remembered, too, that the favorable price in Oklahoma for last year's crop of peanuts, together with the ravishes of the boll weevil, probably will tempt many to expand their acreage of peanuts for 1929. Such a policy of expansion for the state as a whole is not advisable under present conditions.

The tariff increase on peanuts, authorized on January 19th of this year, will not materially affect the price of the Spanish type of peanuts. Importations of peanuts in recent years have been largely of the jumbo type, and any price increases due to tariff restrictions will be largely confined to the larger type of peanuts. Importations in recent years have averaged about 88 million pounds annually, a quantity equivalent to only 11 per cent of the average amount harvested in the United States. Oklahoma alone in 1928 grew nearly one half as many peanuts as were imported on the average in the four previous years. If the production of peanuts in Oklahoma should be increased at the same rate as it has been increased the past two years, our production alone would more than equal the amount formerly imported.

Either a large acreage of peanuts this coming year, or very favorable weather conditions, might easily place peanuts on a feed value price basis next fall.—J. F. Page.

BEEF CATTLE

While Oklahoma farmers may expect continued good prices for beef cattle in 1929, facts indicate that prices are probably about at the peak of the cycle. Price situations similar to the present have generally been followed by increased production and reduced prices. Farmers who are now raising beef cattle may profit by moderate expansion during the next two or three years though prices go somewhat lower, but this is not a favorable time for new producers to enter the cattle business.

While average prices of slaughter cattle in general during 1929 will probably be little of any higher than in 1928, the seasonal low point in prices which usually occurs in May will probably be somewhat below that of last year. During the first half of this year prices of higher grades of slaughter cattle will probably decline below the price which prevailed for such grades during the first six months of 1928, while the price level for lower grades will likely be somewhat higher than the prevailing prices for lower grades during the first half of 1928.

During the second half of 1929 slaughter cattle prices may reach a peak higher than in 1928. Choice heavyweight cattle may sell at a premium during the last few months of the year.

The number of cattle on the farms of Oklahoma on January 1, 1929, showed no change from the number on January 1, 1928.

Feeder cattle prices will probably not average as high in 1929 as in 1928 since demand for feeders during 1929 is not expected to be quite as strong as in 1928.

The total number of cattle on farms in the United States on January 1, 1929, was 55,751,000 head which is 70,000 head or 0.1% more than on January 1, 1928. This increase is negligible. Market supplies in 1929 are expected to be less than last year, due to a tendency to hold back heifers for expansion of herds. Total slaughter will probably be correspondingly less than last year.

"So long as there are no changes in present regulations governing impor-

tations of meat animals and meat products into the United States, there seems to be no reason to anticipate serious competition from foreign sources in our domestic markets." According to the report issued by the U. S. Department of Agriculture.

Although imports of cattle, calves, beef and veal increased somewhat during 1928 as compared with the preceding year, the total of such imports was less than six per cent of the total supply of beef and veal.

The demand for slaughter cattle and for beef in 1929 will probably show little or no change from that of 1928. Any effect resulting from less favorable business conditions will probably be offset by decreased supplies of beef and higher prices of other meats.—T. S. Thorfinnson.

D A I R Y

The gradually increasing demand for dairy products will probably maintain about the present spread between the prices of feed and milk products until there is such a material change in the beef situation that beef cattle raisers again turn to dairying.

The estimates of the Oklahoma Crop and Livestock reporters in December, 1928, of the average value of milk cows per head was just double the similar estimate of six year previous; \$37.00 per head in December, 1922, and \$74.00 in December, 1928. The price of dairy cows tends to follow beef prices. During the past two years both dairy and beef cattle prices have risen sharply. The average price of dairy cows in Oklahoma in 1926 was \$51 per head; in 1927 it was \$56, and in 1928, \$70.

The amount of dairy products sold from Oklahoma farms practically doubled between 1919 and 1924. The upward trend in Oklahoma dairy production has continued at a rapid rate since 1924. The number of milk cows has increased 10 per cent during the past four years. Two new cheese plants were opened in the state during 1928. Butter-fat prices have ranged from 1 to 2 cents per pound above prices of 1927, averaging 42 cents per pound this past year.

The dairy situation in Oklahoma does not warrant a continued expansion at the rate of the past ten years, particularly so for the man who buys into the business with dairy cows selling at present prices. There is no immediate prospect for a decline in cattle prices, but lower prices should be anticipated a few years hence.

The number of milk cows on farms in the United States is about the same as at this time last year. There is about one per cent more yearling heifers and heifer calves than that required to maintain the present number of dairy cows. The milk production per cow has increased about 10 per cent in the past four years. Steady prices indicate that the present rate of increase of milk production is adequate for current consumptive demands.

In recent years there has been some shift of the dairy manufacturing industry southward and westward. In the Southern States condensed and evaporated milk production has increased from less than one per cent of the total domestic production in 1924 to 3.6 per cent of the total in 1927. Butter production was about 4 per cent of the United States total in 1924 and 5.6 per cent in 1927. Cheese production also has shown a considerable gain. Moderate expansion in dairying in this section seems likely to continue.

The consumption of dairy products was maintained throughout 1928 despite the slightly higher prices which prevailed. Demand seems likely to remain high through the first half of 1929 with a possible downturn in demand toward the end of the year or in 1930. Improvement in our feeding practices and existing dairy stock offer profitable means of increasing the returns from dairying. Improving the quality of dairy products should also lead to better returns.—P. H. Stephens.

POULTRY AND EGGS

The prospective supply and demand situation indicates higher

prices in Oklahoma for poultry during the first half of the current year than prevailed a year ago and prices for eggs during the first six months lower than those in 1928 but higher than those of 1927. Demand for poultry and poultry products during the later months of the year will be less if industrial activity slackens.

Poultry prices have been fairly satisfactory in Oklahoma this past year. Prices for chickens in the fall of 1928 ran about three cents per pound higher than in 1927.

Egg prices in Oklahoma in 1928 averaged 25 cents per dozen or two cents more than during the previous year. The average monthly prices received by producers for eggs varied between 20 cents in July and August and 34 cents in November, December and January. There appears to be a tendency toward more uniform year round production and less seasonal variation in prices than formerly. The average of several years in the past indicates that the price of eggs normally doubles between spring and the late fall months. More producers would profit if they planned their poultry production to take advantage of these normal price swings.

There is apparently somewhat of an oversupply of eggs on the market and in cold storage at the present time. Present egg prices are weak. Eggs have been abnormally low in December and January.

In parts of Oklahoma, insufficient eggs and poultry are produced to supply the local demand in all or most of the year. This makes some of our local markets particularly attractive. Producers who fit their production both as to a season and quality to these local requirements will find poultry profitable.

The situation is favorable to producers of poultry because of the relatively smaller stocks of chickens on farms, smaller cold storage holdings and larger supplies of feed. Egg prices will be affected favorably by the smaller number of layers on farms and adversely by the unprofitableness of the past season's storage operations and by the unusually large stocks of both shell and frozen eggs in storage January 1.

The principal demand for eggs in the spring is for storage and for immediate consumption. Demand for eggs for storage was keen in 1928 and the price of eggs packed for storage reached a high level. Demand for immediate consumption was apparently sluggish throughout 1928 and was a factor in checking the usual fall advance in the price of eggs. An unprofitable season for storage operations followed; consequently demand for eggs for storage may be considerably less during the coming season particularly for the lower grades.

Quality continues to be a factor of growing importance in the egg situation. Producers who make no special effort to market high quality eggs in the fall and winter are likely to find that egg production at that season is becoming less profitable, compared with previous years. With new regulations for the sale of eggs on a quality basis, especially in retail channels, and more discrimination on the part of consumers, many dealers have begun to show a preference for the best packs of storage eggs whenever the current receipts of so called fresh eggs have shown much irregularity in quality.

Prospective supply and demand point to a price level for eggs during the season of flush production this year somewhat lower than that which prevailed during the into-storage period in 1928, but higher than during the corresponding period of 1927.

Dressed poultry receipts at the four principal markets were 3½ per cent greater in 1928 than in 1927, running heavier in the early part of the year and lighter at the close. The 1929 receipts to January 22, were 5 per cent below those of the same period last year.

Favorable prices for both live and dressed poultry are indicated during the first six months of the current year at least, because of the smaller stocks of poultry on farms, and the relatively low storage stocks. The supply of poultry available for market during the next six months is comparatively fixed and must come mainly from the stocks now on farms or in cold storage.

try than with eggs. Higher prices, however, might reduce consumption and stimulate broiler production and the sale of a larger proportion than usual of the laying stocks on farms. Moreover, if heavy production of chicks should occur this spring, and should demand decrease because of a possible slackening of business activity when this new supply becomes available for the market in the fall, poultry prices may become less favorable during the latter part of the year.

Poultry prices for the past several years have held up much better than have egg prices. If this relationship continues, some shifting toward more emphasis on the meat-producing side of poultry farming may be expected.—P. H. Stephens.

S H E E P

Sheep raising may be made a profitable sideline on many Oklahoma farms.

There has been a fifty per cent increase in the number of sheep on Oklahoma farms in the past five years. On January 1, 1929, there were 107,000 sheep on Oklahoma farms. Sheep have been profitable this past year; wool has sold at from 30 to 35 cents per pound and lambs from 10 to 13 dollars per hundred pounds on the local markets.

Stimulated by the relatively high prices of wool and mutton, sheep production has increased about 25 per cent during the past five years in the United States as a whole. The present number of sheep reported is the largest since 1911. The United States, during the past three years has produced over one-half its total wool consumption. Imports exceeded domestic production from pre-war years up to 1926.

So long as we produce only about one-half of our wool requirements, the height of the wool tariff will be a large factor in determining wool prices. The present prices for wool seem to be steady and likely to remain attractive. Due to the recent large increases in our mutton production it is doubtful if higher prices can be expected. In fact further increase in production will likely bring about lower sheep prices.

On many Oklahoma farms a few sheep to act as scavengers and consumers of otherwise waste products make a profitable minor enterprise. Fencing and dogs are the two deterring obstacles, otherwise a few sheep bring in the easiest dollars made on a farm.

With approximately one sheep for each two farms it is felt that many Oklahoma farmers are overlooking a profitable sideline and a means of converting otherwise waste products into dollars. The fact that the number of sheep in the state has increased 50 per cent in the past five years indicates that many Oklahoma farmers are finding them profitable.—P. H. Stephens.

H O G S

The price which Oklahoma farmers will receive for hogs during 1929 will probably exceed that of 1928 and prices during the winter of 1929-30 are expected to be higher than the prices prevailing this winter. The seasonal advance in hog prices now in progress will probably continue until sometime in March or early April after which the normal seasonal decline is expected to take place. In spite of the seasonal decline, however, prices of hogs during the year 1929 will probably average higher than hog prices during 1928. Slaughter of hogs in the United States is expected to be considerably smaller in 1929 than it was in 1928. No material change is expected in domestic demand, and foreign demand will probably be stronger than it was last year.

The number of hogs on farms in Oklahoma on January 1, 1929, was ten per cent less than the number on January 1, 1928. The December pig survey indicates that the number of sows farrowed in the spring of 1929 in Oklahoma will likely be smaller than the number farrowed last spring, assuming

since the influence of weather and of feeding is far less important with poul-normal relationship between breeding intentions and actual farrowings. Furthermore, the fall pig crop of 1928 was nearly fourteen per cent less than that of 1927. These facts indicate that the supply of hogs in Oklahoma in 1929 will be considerably smaller than last year's supply.

The combined spring and fall pig crop of the United States in 1928 was 6.5 per cent smaller than the crop of 1927. The estimated number of hogs on farms of the United States on January 1, 1929, was about nine per cent less than the number on January 1, 1928. After due consideration of all available facts the United States Department of Agriculture estimates that the supply of hogs for slaughter in the United States for the ten-month period, January to October, 1929, will probably be from 3.5 million to 5.5 million head smaller than the supply during the corresponding period in 1928. This indicated decrease in slaughter supplies is partially offset by heavy storage supplies of pork and lard which on January 1, 1929, were 176 million pounds greater than on January 1, 1928. This surplus over that of a year ago is equal to about 1.1 million hogs.

Fewer hogs, smaller supplies of feed, and higher prices for some important feeds suggest smaller European pork production in 1929 with a consequent higher level of prices. Europe will probably offer a better outlet this year than last for American hog products, especially lard.

No material change in the present level of domestic demand seems likely during the next six months. If some slackening in demand in the winter of 1929-30, should occur as a result of decreased business activity, this will be more than offset by the probable reduction in hog supplies.—T. S. Thorfinnson.

HORSES AND MULES

Now is a good time to replace old worn out workstock with cheap young horses and mules at low prices.

There are about two-thirds as many horses in the United States now as ten years ago. The Division of Crop and Livestock Estimates reports that in 1919 there were 21.5 million head of horses on farms. At the present time the number of these animals is approximately 14 million. The number of mules on farms has increased during the past ten years from 4.9 million in 1918 to approximately 5½ million now. The number of horses and mules used in cities has shown a very striking decline. It is estimated that whereas ten years ago three million horses and mules were used in the cities, the present number of horses and mules in cities is about one million.

The number of horses in Oklahoma has been decreasing at the rate of 25,000 per year for the past five years. The estimated number of horses on Oklahoma farms was 516,000 on January 1, 1929. The number of mules in Oklahoma shows a slower rate of decline, and now stands at 333,000.

Before the introduction of the tractor there was a cycle in the price of horses usually of about twenty-five years in length. Horses were high as compared with other farm products in 1886, and again in 1911. Horses now have a purchasing power of about 30 per cent of their pre-war value. The crop reporters for the state of Oklahoma estimated that the average price of farm horses was five dollars higher this past year than during the previous year. The average price of horses was estimated to be \$44 per head in 1927, and \$49 in 1928. Horses averaged \$113 in value per head in Oklahoma in 1910.

The auto, truck, and tractor have displaced at least ten million horses and mules in the United States in the past ten years. They have done this in spite of very cheap horses and very cheap feed. The tractor and truck are being adapted to an increasing number of uses both on farms and in cities where the motive power was formerly horses and mules. The number of tractor registrations in Oklahoma in 1928 was 22,881. The Federal Census of 1925 enumerated 10,039 tractors and in 1920 only 5,786 tractors in Oklahoma.

The decrease of one-third in the United States total horse and mule sup-

ply during the past decade has not been sufficient to bring about profitable horse prices. The present number of horses and mules on farms and in cities, about 20.5 million, is larger than our present needs require. This number will continue to decline for several years.

There will be a continued displacement of horses and mules by tractors and trucks. On the other hand, horse prices have likely reached their low point. Local demands and the need of replacements on one's own farm may make the raising of a few colts advisable where conditions are particularly favorable for horse or mule production.

The gasoline engine has retarded the upswing of prices in the horse cycle certainly by five years. The average age of horses on farms has increased materially the past few years, normal replacements have not been made, breeding stock is generally scarce and aged. When the demand for horses and mules does eventually catch up with the supply, prices may be expected to rise rapidly.

The number of colts now being raised is sufficient to maintain a horse and mule population of about 11 million head. Horse and mule prices may be expected to raise first and highest in the South on those farms where the tractor seems least adapted. It is not anticipated that the prices of horses and mules will again reach their pre-war relationship with other agricultural commodities. The smaller total number required in the future should restrict their commercial breeding to the more favorable low-cost producers of horses and mules. The prospective producer of horses and mules should now avail himself of the opportunity to obtain good young mares at low prices.—P. H. Stephens.

PRICES

Nine out of twenty important Oklahoma farm products had a higher purchasing power in December, 1928, than in the corresponding months in the pre-war period. Of these nine products butter, beef, dairy cows, chickens, and eggs had a higher purchasing power than a year ago. Wheat, feed grains, hay, potatoes, apples, hogs, and horses are cheap relative to pre-war values.

The 1928 cotton crop both because of the lower price and the lower yield per acre was much less profitable than the 1927 crop. Lower wheat prices were in part compensated by higher yields per acre in 1928.

The weighted average of the prices of crops sold was 10 per cent less than a year ago while the price of livestock and livestock products was 6 per cent higher. Normally about 50 per cent of the total value of the products sold by Oklahoma farmers comes from cotton, 20 per cent from wheat, 15 per cent from meat animals, 10 per cent from butter and eggs, and 5 per cent from miscellaneous crops and livestock.

Particular attention should be paid to the trend and position of the index numbers of the various crops and kinds of livestock. When the price of any product is such that a given amount of it will buy more than the normal amount of other commodities, its production is stimulated. This tends to be true even though the gross value per acre or the total amount received is normal or less. On the other hand, low prices tend to discourage production. Both of these facts are simply truisms of the statement that prices of all products in the long run tend to return to an equilibrium of relationship. Prices tend to assume their former relationships unless some important new factor enters in the cost of production or demand permanently changes. Thus from long time point of view, cotton is relatively high, and wheat and the feed grains cheap. Beef and poultry prices are high and such as to stimulate production so that ultimately lower prices must be expected. Beef cattle have a long price cycle, about 15 years, because once the breeding stock is depleted it takes a long time to replenish the herd, raise a surplus, and bring slaughter cattle up to market age.

Hogs have a shorter price cycle, about four or five years. Dairy products do not have the pronounced cycles that are found in the prices of dairy cows

because high milk or butter prices stimulate farmers to practice better feeding and increase production quickly in this way. Likewise low prices of dairy products soon decrease production because less intense feeding is practiced. Poultry and eggs are similar to dairy products in that they are very sensitive to price relationships and their production can be quickly modified to bring about price adjustment. Grains and cotton do not show regular cycles of high and low prices because the weather plays so large a part in the determination of crop yields.—P. H. Stephens.

DECEMBER PRICES RECEIVED BY OKLAHOMA FARMERS

Items	PRICE PER UNIT					
	1914	1920	1925	1926	1927	1928
Cotton	6.40	9.40	15.40	9.40	18.70	16.80
Cottonseed	14.10	17.00	26.20	14.40	38.00	35.00
Wheat .....	.99	1.42	1.52	1.21	1.20	.99
Corn .....	.65	.56	.87	.59	.64	.72
Oats .....	.42	.43	.49	.38	.49	.47
Barley .....	.54	.74	.73	.58	.64	.65
Rye .....	.95	.98	1.00	.85	.94	.89
Irish Potatoes .....	.91	1.72	2.43	1.75	1.55	.95
Sweet Potatoes .....	.96	1.45	1.45	.90	.80	.95
Hay	8.05	10.75	11.00	10.60	8.00	3.00
Apples	1.00	2.05	1.51	1.20	1.90	1.55
Horses	99.00	73.00	42.00	42.00	44.00	44.00
Beef	5.80	5.40	5.00	5.60	7.40	7.80
Vealo	6.80	7.30	7.00	7.00	9.40	9.80
Sheep	4.90	6.00	8.30	6.00	7.90	6.70
Hogs	6.40	8.40	9.80	10.70	7.80	7.40
Milk Cows	58.50	63.00	46.90	51.00	64.00	73.00
Butter .....	.24	.49	.42	.41	.43	.44
Chickens	9.30	17.00	16.60	17.50	16.70	18.00
Eggs .....	.25	.61	.44	.42	.38	.40

PURCHASING POWER

Cotton	67	45	92	59	124	117
Cottonseed	84	46	90	56	142	138
Wheat	119	78	105	88	91	78
Corn	112	44	87	61	70	82
Oats	106	49	70	57	77	77
Barley	96	59	73	64	70	75
Rye	112	52	67	59	69	69
Irish Potatoes	95	80	143	107	99	64
Sweet Potatoes	96	66	84	54	50	63
Hay	100	61	78	79	62	65
Apples	94	88	82	68	111	95
Horses	101	34	25	26	28	30
Beef	125	53	62	73	101	111
Veal	101	69	83	86	122	133
Sheep	116	64	113	85	117	104
Hogs	103	62	91	104	79	78
Milk Cows	129	63	59	67	88	106
Butter	110	94	102	104	106	122
Chickens	113	94	115	127	127	143
Eggs	100	111	101	100	95	106
All Crops	79	50	94	63	118	112
Livestock	110	84	89	95	100	110
All Products ...	86	58	93	70	113	111