

CROP and BUSINESS CONDITIONS

NINTH FEDERAL RESERVE DISTRICT

REPORT OF

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TO THE

FEDERAL RESERVE BOARD

WASHINGTON, D. C.

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MINNEAPOLIS, MINN.

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EDITORIAL NOTICE:—This report is prepared monthly in the office of the Federal Reserve Agent for the purpose of providing the Federal Reserve Board with complete, accurate, and impartial information concerning business conditions in the Northwest. It is also printed for public use and will be mailed free of charge to anyone making request for it.

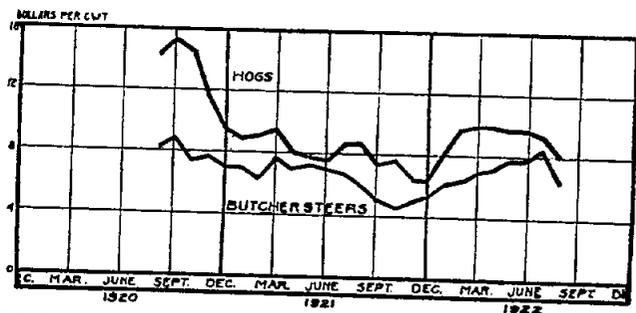
SUMMARY FOR THE MONTH

The prices of all grains have declined, and some of them heavily. This has tended to minimize the advantage of a big crop. Marketing of rye, cattle, and sheep has been abnormally heavy and all live stock prices have declined except for calves, the latter being sustained by the substantial movement of feeders back to the farms. Lumber, copper, and iron ore production as well as building and most manufacturing has been better in volume both as compared with last month and a year ago. Employment has been normal and accumulated stocks of merchandise and materials have not changed greatly except for some declines in lumber. The crop moving demand for money to date has not been heavy, interest rates have declined substantially, and investment funds are in much better supply. However, the general improvement both in volume of business and financial conditions has not helped profits sufficiently to reduce business failures to a normal level. It will require several months to determine whether the apparent gain in the momentum of business in this district will continue in the face of a coal movement up the lakes equal to but 6 per cent of a year ago and if the present price level is maintained for the grains.

GENERAL SURVEY

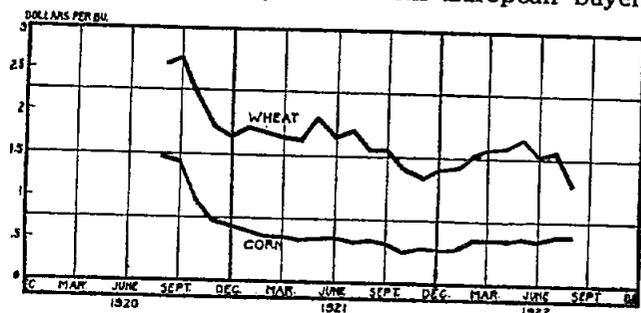
Prices at central markets in this district for a majority of the products of the farm declined in August from the July figure, due rather to the weight of supplies than to decline in demand. Livestock prices for the grades which this office records showed three declines, one increase and two prices unchanged. Heavy marketing of cattle and sheep broke the median price of butcher steers \$2.15 between July and August and the median price of lambs but 25 cents, the smaller reduction of the latter being due to the increased demand for feeders. Although there was a decline from July in the receipts of hogs, the abnormally heavy receipts forced

hog prices to continue the decline which started in May, the slump this month amounting to \$1.25. The median price of butcher cows and stock and feeder steers remained unchanged and the median price of calves rose sharply (\$1.75), reflecting the increasing demand for feeder calves which has affected the price a month earlier this year than a year ago.



Median Prices of Hogs and Butcher Steers at South St. Paul

Grain prices were all lower for cash sales at Minneapolis in August than in July, as is to be expected when the new crop commences to reach the terminals. The median price of wheat broke 39 cents between these two months, showing the effect of weak European support, as well as the heavier receipts. Rye, which sells on a much lower level, was in extraordinary favor with European buyers



Median Prices of Wheat and Corn at Minneapolis

and, therefore, declined less than 6 cents. Flax declined 25 cents, barley was off 7 cents and oats off more than 3 cents. The median price of corn remained practically unchanged.

Wholesale produce prices at Minneapolis showed increases in the important quotations, except for seasonal declines in vegetables. Eggs, which have been selling at the lowest price in several years, showed a sharp increase from 19 cents per dozen to 26 cents per dozen. There were smaller increases in butter, veal and hens. The price of the best flour has remained unchanged since August 15 at \$6.65 per barrel, which is the lowest point reached in the present phase of prices.

Interest rates at Minneapolis during the month ending September 15 made the most radical change since this office began collecting data in January, 1919. The present rates are now well below any quotation in 1919. As is customary at this time of the year, the spread between the highest and lowest rates quoted for different classes of paper became narrower. The customary rates quoted for most classes of paper declined. Customers' prime commercial paper now quoted at $4\frac{1}{2}$ and 5 per cent declined 1 per cent. Demand, and 3 months paper with stock exchange collateral as security now quoted at 5 per cent declined 1 per cent and longer maturities declined one-half per cent to a $5\frac{1}{2}$ per cent level. Bankers acceptances declined three-fourths per cent; inter-bank borrowings, paper secured by warehouse receipts and commercial loans secured by government bonds declined one-half per cent; but rates for prime commercial paper purchased in the open market and having 4 to 6 months maturity increased one-fourth per cent.

The credit situation in this district has given little indication of crop-moving demand. This Federal Reserve Bank did not show any change in holdings of discounted bills during August, but there was an increase in reserves of $1\frac{1}{2}$ million dollars, a decline in United States securities owned of one million, and an increase in deposits of one-half million. Moreover, in the first two weeks of September, bills discounted declined one and one-half million dollars, and Federal Reserve notes outstanding increased two and one-half millions, both of which changes were reflected by a rise in reserve of more than 4 millions.

During the month of August thirty-three selected member banks located in the larger cities did experience an increase in loans of 15 million dollars, but this was made possible by an increase of deposits of 6 millions and the sale of 8 millions from their United States securities. And in the first two weeks of September their loans increased an additional 7 million dollars, accompanied by an increase of 11 millions in deposits. There was less broker's paper outstanding in this district at the end of August than at the end of July, and fully one-third less than in August a year ago.

All Federal Reserve Banks combined during the

month of August showed a small increase in bills discounted and purchased and in Federal Reserve notes outstanding and a small decline in reserves. In the first two weeks of September there was a rise of 60 million dollars in Federal Reserve notes outstanding, an increase of 33 millions in bills purchased, but a decline of 17 millions in bills discounted, and small changes in the other items of the balance sheet.

Investment funds apparently were in greater supply during August than during July because sales of securities by the more important firms with offices in the Twin Cities increased 12 per cent and savings and time deposits also increased slightly. As compared with a year ago, there has been an increase of two-thirds in sales of securities, an increase of one-fifth in time deposits and an increase of one-twentieth in savings deposits. Every class of security other than farm mortgages was sold in greater volume in August this year than in August last year or in July this year.

Reports received from thirty-three selected member banks located in the larger cities of this district, covering changes between August 2 and August 30, show an increase in holdings of United States securities of \$2,356,000, while their holdings of other stocks, bonds, and investments increased \$1,825,000. This Federal Reserve Bank sold or collected at maturity one million dollars of United States securities during the same period. Reports received from nearly 800 selected member banks located in the larger cities throughout the United States showed a decrease meanwhile, of \$2,000,000 in United States securities held, and a decrease of \$16,000,000 in their holdings of other stocks, bonds, and investments.

Coal stocks at the Duluth-Superior harbor on September 1, included 23,883 tons of hard coal and only 120,384 tons of soft coal, as reported by the N. W. Coal Dock Operators Association. Coal receipts at the docks were 11 per cent smaller for soft coal and 25 per cent smaller for hard coal during August than in July. These percentages of the pitifully small monthly receipts this year are of little importance. The main fact of interest to the Northwest is that only 94,802 tons of hard and soft coal combined were received during August, a volume which is only 6.4 per cent of the August receipts of 1,486,793 tons, a year ago. Moreover, for the season through August 31, only 466,500 tons of soft coal and 25,512 tons of hard coal have been received, making a total of 492,012 tons in all. A year ago when receipts were not abnormally large, during this same period, there were 6,513,729 tons of soft coal and 1,206,699 tons of hard coal received, making a total of 7,720,428 tons of all kinds of coal. This year's receipts, therefore, have been only 6.4 per cent of those a year ago. This means rail transportation and coal distribution will need to be organized very carefully if regular and sufficient anthracite coal supplies are to be available in the Northwest this winter. Local sources

of lignite and sub-bituminous will relieve shortages in many parts of this district, and bituminous mines outside of this district, such as those in Illinois, are much nearer in location than those of anthracite, all of which are in Pennsylvania.

The volume of business as indicated by the dollar amount of checks charged against the accounts of banks' customers in nine cities of this district showed a 4 per cent increase between July and August, which is a smaller increase than occurred last year, but larger than the increase in 1919 between these two months. In 1920 the volume declined between July and August. August check payments were 3 per cent larger this year than a year ago.

Grain receipts at Minneapolis and Duluth during August were more than double the July receipts, owing principally to a 10-million bushel increase in the receipts of rye which were 11 times the July total. Receipts of wheat increased 6 million bushels, or about three-fourths of the July figure. Receipts of oats and barley doubled, and, while flax receipts remained small, the August receipts were one-half larger than those in July, which is a satisfactory showing since normally the receipts of flax do not begin their fall increase until October. Receipts of corn dropped two-thirds between July and August.

As compared with the ten-year average for the month, receipts of rye were much above normal, wheat and oats were somewhat above normal, but barley and flax were below normal. Corn receipts, for which no normal is available, continued low and will not increase materially until December, according to the experience of the past two years.

As compared with last year, this year's receipts of all grains in August were down one-eighth, although rye receipts this year were three times as large and corn receipts were up one-fourth. Receipts of all other grains were one-half to two-thirds of last year's figures.

Abnormal increase in marketing of rye: During August, terminal receipts of rye (mostly 1922 crop) reached the unprecedented figure of 11,972,537 bushels. Rye receipts for the past year or two have been running at about double the normal amount, measured by the average monthly receipts over the past ten years, on account of the large rye crops raised in the Northwest since the war. August receipts of rye this year were more than nine times as large as the normal for the month. During August about one-fourth of the total 1922 rye crop of the Northwest was marketed.

The majority of the rye which is now moving to market will be for export. Of the twelve million bushels received during August, more than 8,600,000 bushels have been shipped down the lakes and to the seacoast. The movement of rye to foreign countries promises to eclipse all records this year. There was a somewhat larger export movement of rye from United States ports during 1922

up to September 9, than during the same period in 1921, but these figures include only about three weeks' movement of this year's crop. With the export of rye now in transit, the total exports for 1922 will be far ahead of those in 1921.

From the following table the conclusion may be drawn that foreign countries are less desirous of securing wheat than the other grains which have nearly as much food value per bushel and are much lower in price. The movement of corn for export has greatly increased, oats has increased five times, and rye has increased somewhat. The movement of wheat has been halved and barley has declined one-sixth.

TOTAL GRAIN EXPORTS FROM THE U. S.
(Bushels—000's omitted)

	Wheat	Corn	Oats	Barley	Rye
1921					
Total to Aug.					
1	148,066	74,619*	4,460*	10,451*	18,654*
4 wks. ending					
8-27	33,593	1,346	75	3,566	556
2 wks. ending					
9-10	15,731	928	12	2,989	420
Total	197,390	76,893	4,547	17,006	19,630
1922					
Total to Aug.					
1	66,440	124,964*	20,796*	10,023*	20,531*
4 wks. ending					
8-26	21,217	4,537	1,671	3,148	2,118
2 wks. ending					
9-9	12,079	1,975	1,315	1,183	2,607
Total	99,736	131,476	23,782	14,354	25,256
Per cent 1922					
of 1921.....	50.5	171.0	523.0	84.4	128.6

*Including flour and meal.

Grain stocks in terminal elevators, totaling 21 million bushels, increased slightly during the month of August, but were one-third lower than a year ago. Stocks of oats, which represent almost two-thirds of the total grain stocks in terminal elevators, were slightly larger at the end of August than at the end of July, but down one-fourth from the figure for a year ago. Stocks of rye were almost eight times as large and barley more than three times as large at the end of August as at the end of July, and rye stocks were slightly larger than last year, but barley stocks were down three-fifths from last year. Wheat stocks, totaling less than 2 million bushels, were down one fifth from a month ago and one-half from a year ago. Stocks of corn, while down four-fifths from last month, were two-thirds larger than a year ago. Flax stocks approached the vanishing point during August. Only 15 thousand bushels, one-third of the total last month and less than 1 per cent of the total a year ago, were on hand at the end of August, a figure so low, that parcels of one hundred to five hundred bushels formed a large part of flax sales during the month.

Livestock receipts at South St. Paul during August indicated the commencement of the fall run of cattle and sheep. The receipts of cattle have been greater than the 10-year average in every month

since February last and were fully two-thirds larger than this average during August. This increase in August is certainly larger than could be accounted for by the normal rate of growth of the country. Sheep receipts have been above the 10-year average for two months, the excess being even greater in August than in July. There should be an even larger movement of sheep in the next three months, according to the 10-year average. Receipts of hogs declined 28 per cent between July and August, which is a normal occurrence, but the total number received is about one-half larger than the 10-year average and slightly larger than a year ago. The fall run of hogs does not begin until October. Receipts of calves which are about double the normal amount, showed a small decline between July and August, but were one-half larger than a year ago.

The movement of feeder stock to the country again reached remarkable totals. Shipments of feeder sheep were five times as large in August as in July and shipments of feeder cattle double, while shipments of hogs increased 17 per cent and feeder calves remained about the same. As compared with a year ago, the comparison is even more striking. More than thirteen times as many calves went to the country this year as last, almost three times as many sheep, more than twice as many cattle and more than one and one-half times as many hogs.

Marketing of mill products, as shown by the shipments of wheat flour, linseed oil and oil cake increased slightly between July and August, but was less than a year ago in August. The shipments of flour from important cities in this district were 7 per cent larger in August than in July, but 11 per cent smaller than a year ago, while the shipments of linseed products were 8 per cent larger in August than in July, but amounted to about one-third of the volume a year ago.

Traffic through the Soo Canals eastbound was about as large in volume in August as in July, but almost twice as large as a year ago. Westbound traffic increased slightly between July and August, but was down four-fifths from the figure of a year ago. Eastbound shipments of wheat and copper were about half as large in August as in July, but shipments of other grain almost doubled, and flour shipments were up one-fifth. As compared with a year ago, the copper tonnage was up one and one-half times, iron ore doubled, and grain, other than wheat, was up one-third. There were declines in eastbound shipments of wheat, flour and lumber. Shipments of coal westbound were only 8 per cent as large in August this year as a year ago.

Iron ore shipments from upper lake ports were about the same in volume during August as during July, but more than twice as large as in August last year. Total shipments this year from the opening of navigation to August 31, were three-fourths larger than for the same period last year.

Wholesale trade showed increased activity in August over July in all lines. Dry goods sales were

up one-half, farm implements up one-third, groceries and hardware up one-eighth, and sales of shoes increased one-half. As compared with a year ago, August sales this year were slightly less in dry goods and groceries, larger by one-fifth in shoes and hardware and almost one-half larger in farm implements.

Retail trade as evidenced by department store sales showed a 14 per cent increase between July and August, and practically the same volume of sales as in August last year. Stocks of merchandise at the end of August, were 3 per cent larger than at the end of July, but 3 per cent smaller than a year ago.

Retail lumber sales were one-fifth larger in August than in July, and more than one-fifth larger than in August last year. Stocks declined slightly during the month of August and were one-eighth lower than a year ago.

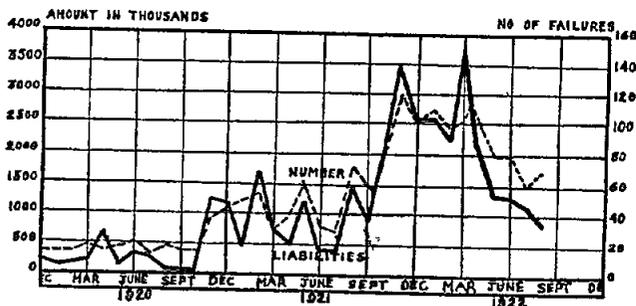
Lumber manufacturers shipped to retailers 15 per cent more lumber in August than in July, but received orders for 7 per cent less lumber. As compared with a year ago, August shipments this year were up more than one-third and orders received by manufacturers were almost double. Manufacturers cut one-tenth more lumber in August than in July and almost one-half more than in August last year. Their lumber stocks increased 6 per cent during August, but were 18 per cent lower than a year ago.

Projected building operations as evidenced by the valuation of permits granted in eleven selected cities of this district increased almost 9 per cent between July and August, and for the same cities, there was an increase of one-half over August valuations of a year ago. The number of permits granted during August was 5 per cent larger than the number during July, but 6 per cent smaller than the number in August last year.

The production of copper in this district increased 6 per cent between July and August and was five times as large as the production in August last year, when a number of the mines were shut down on account of sluggish market conditions then prevailing.

Flour production in this district increased slightly in August over July, but was somewhat lower than in August a year ago. Duluth-Superior mills were much more active in August, than in July or in August last year, but St. Paul mills showed a decline in both comparisons, and Minneapolis and outside mills increased only slightly between July and August, and produced a smaller quantity as compared with a year ago. Minneapolis flour production during August was a trifle less than normal, which offsets a production during July of the same amount more than normal, leaving the total Minneapolis production for the year considerably less than normal.

Business failures are continuing at a rate above the average, with a tendency to include a larger proportion of the smaller firms. Business failures increased 15 per cent in number, but declined 22 per cent in liabilities in August as compared with July. Failures in August this year, were 4 per cent lower in number than in August a year ago, and 39 per cent lower in liabilities.



Business Failures in the Ninth Federal Reserve District
(Reports from R. G. Dun & Company)

Crop estimates of the United States Department of Agriculture for this district issued September 1, show that threshing returns have not appreciably altered the favorable estimates made earlier in the season. The four complete states in this district have harvested a much larger crop of wheat, rye, oats, flax and white potatoes this year than last, and larger than the five year average for the years 1916 to 1920, but the barley crop, while larger than last year, is smaller than the five year average, and the corn crop promises a return somewhat smaller than last year, but larger than the five year average. Of the wheat raised in the four states in this district, it should be remembered that 79 million bushels, or about one-third of the production this year, is durum. Last year about 49 million bushels, or one-third of the production, was durum, and for the five years from 1916 to 1920 the average durum production was 32 million bushels, which was about one-fifth of the total wheat production. Durum does not bring as good a price as wheat, and its proportion of the total wheat estimate must therefore be borne in mind. The price which the farmer receives for his product must be considered, as well as the amount produced, before forming conclusions as to his purchasing power or economic welfare.

CROP ESTIMATES FOR MINNESOTA, NORTH DAKOTA, SOUTH DAKOTA AND MONTANA COMBINED.

(Bushels—000's omitted.)

	September 1 1922	Final 1921	Average 1916-1920
Wheat	227,241	152,355	169,946
Corn	246,427	285,639	234,623
Oats	321,270	213,024	249,333
Barley	75,616	53,231	79,119
Rye	44,613	23,137	27,759
Flax	11,389	7,789	10,886
White Potatoes	73,263	48,505	46,478

For the whole United States the wheat, rye, flax and potato crops are all larger this year than a year ago, and larger than the five year average. Barley and oats show a larger return than last year, but smaller than the five year average, and corn, while smaller than last year, is larger than the five year average.

CROP ESTIMATES FOR THE ENTIRE UNITED STATES.
(Bushels—000's omitted.)

	September 1 1922	Final 1921	Average 1916-1920
Wheat	818,665	795,000	799,000
Corn	2,874,000	3,080,000	2,831,000
Oats	1,255,000	1,061,000	1,413,000
Barley	193,850	151,000	197,000
Rye	79,600	57,900	67,800
Flax	11,729	8,112	10,972
White Potatoes	438,398	346,823	357,662

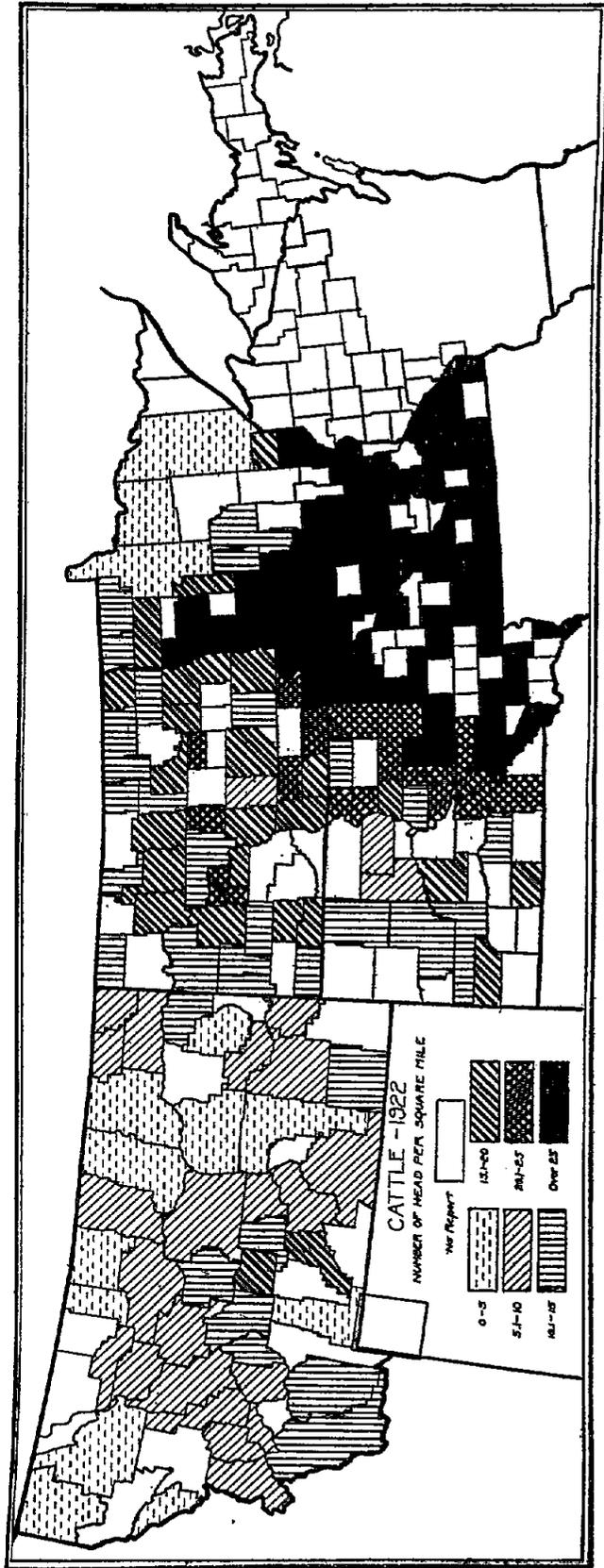
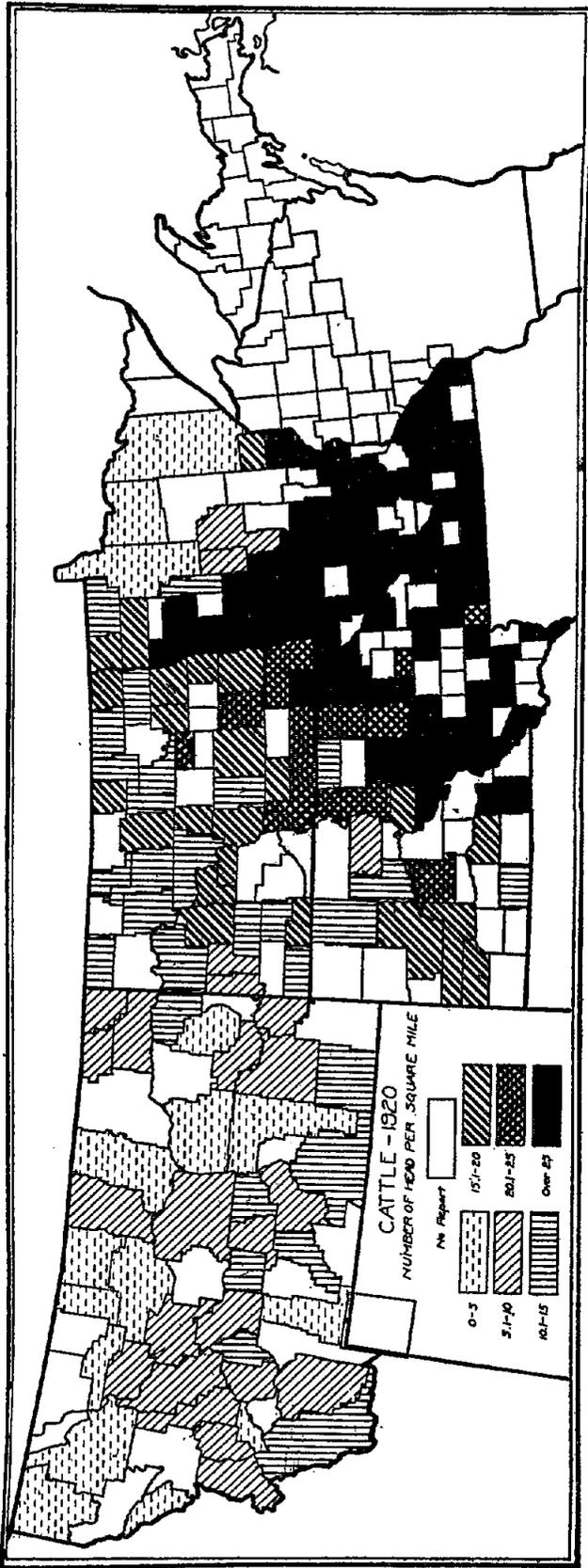
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From the appended figures it will be seen that practically the same relation holds true among the states for horses as for cattle and swine, and that in sheep raising, Montana is the most important state of the four, followed in order by South Dakota, Minnesota and North Dakota.

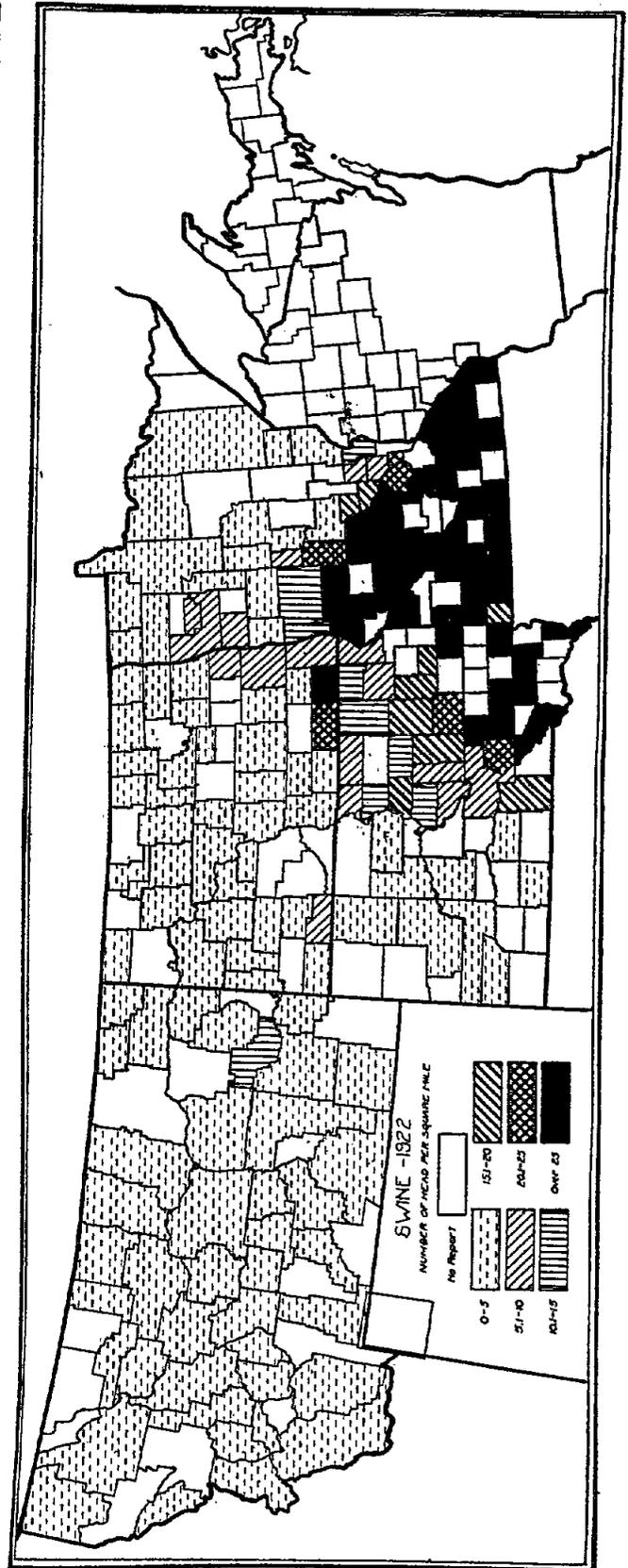
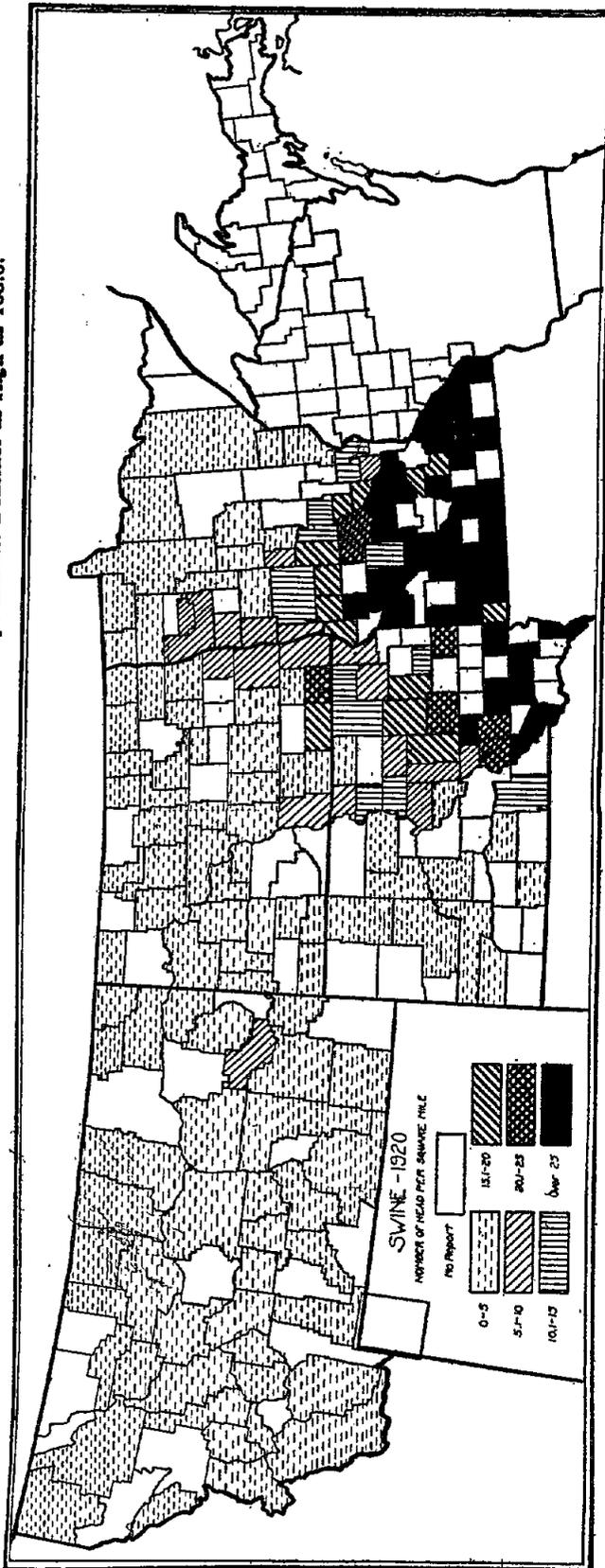
It should be noted that the maps shown in this letter give a somewhat smaller number of head of stock per square mile than the census figures because the maps were compiled from assessors' reports which in every case were lower than the census figures for the counties concerned. The assessors' figures most nearly equal the census figures in cattle, followed in decreasing order by sheep, horses and swine. Among the states, the Minnesota assessors' enumeration of all classes of livestock was nearest to the census figures, followed in decreasing order by North Dakota, South Dakota and Montana, with the exception that the enumeration of sheep in Montana was nearest to the census figures of any of the four states. This discrepancy between the assessors' figures and the census figures, is due partly to the difference in method of securing the figures and partly to a difference of several months, varying in each state, between the time of year at which the assessors' and census takers' figures were collected. If there is any discrepancy between assessors' totals and the actual totals, the variation would probably be the same percentage on any two dates and therefore is a negligible factor in making these comparisons showing the trend.

The estimates of 1922 holdings of the various classes of livestock were compiled by using the assessors' figures for the counties which reported and increasing these figures by the same proportion by which the complete 1920 census for these states exceeded the assessors' reports received for 1920. The assessors' reports received were very fairly representative of the district as a whole, both when compared with the census of 1920 as to number and on an area basis.

CATTLE PER SQUARE MILE, 1920 AND 1922. Black Portions of Maps Indicate Densities as High as 115.1.



HOGS PER SQUARE MILE, 1920 AND 1922. Black Portions of Maps Indicate Densities as High as 103.6.



RECENT CHANGES IN LIVESTOCK HOLDINGS IN THE NORTHWEST

There have been important changes during recent years in the holdings of live stock, and frequent inquiry has been made as to the trend or tendency for each kind of live stock during the last two years. Prospective financing needs and market conditions depend upon these changes to a considerable extent. The recent heavy marketing of hogs and cattle and the large movement of feeder stock to the country can be better interpreted with a background based on the facts as to holdings. To meet this need, data compiled by this office is here presented in summary form with illustrative maps. It is also of interest to know how well the live stock industry has withstood the severe winters of 1919 and 1920, and the depression in prices which commenced in 1920.

Between 1910 and 1920, according to census figures, corrected for variations due to the different time of year in which the two enumerations were made, the outstanding features of the growth of the live stock industry in the four principal states of this district were a trebling of the number of swine, an increase of two-thirds in cattle, an increase of one-third in horses, and a pronounced decrease in sheep.

During the following two years, (1920-22), according to estimates prepared in this office from data described below, there has been an increase of one-fifth in holdings of swine, but decreases in holdings of the other important classes of live stock,

amounting to 2 per cent for cattle, 10 per cent for sheep and 13 per cent for horses.

The holdings of live stock vary materially between these four states. Montana has almost two-thirds of the sheep in the district, but contrary to the current opinion, it holds less than one-fifth of the cattle, less than one-seventh of the horses, and only about one-thirtieth of the swine. Minnesota is the largest holder of cattle, swine and horses, although South Dakota produces a large number of each of these three classes. North Dakota has the smallest number of cattle and sheep, and Montana holds the least number of horses and swine.

The contrast between these states in live stock holdings is even more marked in the relative density of live stock distribution, that is, the number per square mile, using as the land area, all the territory not covered by lakes, marshes, and rivers in each state, regardless of its topography. To show this relative density, maps have been prepared (pages 6 and 7), indicating the number of head of cattle and swine per square mile in 1920 and 1922 in the counties of each state from which we have received reports, since these two classes of live stock are of greatest economic importance in this district. These maps show that Minnesota, predominates to a marked extent in cattle and swine raising, South Dakota is second in both, North Dakota is third in swine, and fourth in cattle, and Montana fourth in swine and third in cattle. Moreover, southern Minnesota and southeastern South Dakota show the greatest density in the district.

(Continued on page 5)

LIVE STOCK STATISTICS FOR THE NINTH FEDERAL RESERVE DISTRICT

	Census	Census	% 1920 of	Estimate	% 1922	No. of Head Per Square Mile		
	1910	1920	1910	1922	of 1920	1910	1920	1922
CATTLE								
Minnesota	2,027,844	3,077,455	151.5	3,090,000	100.5	25.2	38.1	38.2
North Dakota.....	625,508	1,351,023	216.0	1,386,000	102.4	8.9	19.3	19.7
South Dakota.....	1,346,802	2,368,398	175.2	2,066,000	87.3	17.5	30.8	26.9
Montana	871,721	1,288,782	147.8	1,412,000	109.7	6.0	8.8	9.7
Total	4,871,875	8,085,658	165.6	7,954,000	98.3	13.0	21.6	21.2
HORSES*								
Minnesota	829,225	1,001,336	120.8	967,000	96.7	10.2	12.4	12.0
North Dakota.....	656,655	883,192	134.3	812,000	92.0	9.4	12.6	11.6
South Dakota.....	693,511	852,401	123.0	818,000	96.0	9.0	11.0	10.6
Montana	333,322	693,970	208.2	386,000	56.5	2.3	4.7	2.6
Total	2,512,713	3,430,899	136.5	2,983,000	87.0	6.7	9.2	8.0
SWINE								
Minnesota	844,335	2,414,201	285.9	3,265,000	135.3	10.4	29.8	40.4
North Dakota.....	202,168	464,100	229.7	463,000	99.8	2.9	6.7	6.7
South Dakota.....	665,607	1,973,138	296.6	2,195,000	110.1	8.7	19.8	21.9
Montana	58,880	173,762	298.3	205,000	118.0	.4	1.2	1.4
Total	1,770,990	5,025,201	283.9	6,128,000	121.8	4.7	13.4	16.4
SHEEP								
Minnesota	454,133	516,037	113.6	466,000	90.3	4.5	6.4	5.8
North Dakota.....	242,580	301,076	124.0	226,000	75.0	3.5	4.3	3.2
South Dakota.....	501,925	851,143	170.0	703,000	82.5	6.5	11.1	9.1
Montana	4,993,414	2,111,832	42.4	2,023,000	96.0	34.1	14.6	13.8
Total	6,192,052	3,780,088	61.1	3,418,000	90.3	16.5	10.1	9.1

*Including mules, asses and burros.