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MINNESOTA FARM MANAGEMENT SERVICE NOTES

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Prepared by the Farm Management Group at University Farm, St. Paul, Minn.

THE HORSE SITUATION

Much attention has been focused on the horse situation by the sharp decline since 1920 in number of horses on farms. The census figures for horses since 1900 are presented below. Estimates of the Department of Agriculture indicate a further decrease of three per cent by January 1, 1926.

	Minnesota		United States	
	Total horses & mules	% change	Total horses & mules	% change
1900	713,308		21,531,635	
1910	758,959	+ 6.4	24,042,882	+11.7
1920	943.032	+24.3	25,199,552	+ 4.8
1925	850,742	- 9.8	22,266,367	-11.6

In studying these figures one should keep in mind the trend in horse prices. Measured in terms of purchasing power the price of horses declined from 1887 to 1897, then rose steadily until in 1911 it reached the highest point in the past sixty years. Production responded to price. Adjustment in the horse business takes place slowly due to the slow turnover. Even tho prices started to decline sharply in 1915 production continued to increase. In 1920 we still had the largest stock of horses on hand that we have ever had in spite of the fact that during the previous ten years nearly 2,000,000 horses and mules were exported, mostly for war purposes, besides those shipped overseas for the use of our own army. This large production coupled with a decreased demand, due in part to the increasing use of motor power, caused a steady decrease in horse prices until their purchasing power in 1925 was the lowest in sixty years. This decreased price has in turn resulted in a decrease in numbers.

	Minnesota		United States	
	Horses & mules under 2 years	% change	Horses & mules under 2 years	% change
1900	106,838		2,761,054	
1910	78,887	-26.2	2,402,695	-13.0
1920	108,944	+38.1	3,326,958	+41.2
1925	51,139	-53.1	1,626,883	-51.1

This decrease in horses has come about largely thru a reduction in the number of colts raised. This is indicated in the preceding table. Mature horses in the United States have been reduced only 5.6 per cent as compared with 11.6 per cent for all horses and 51.1 per cent for colts. Corresponding figures for Minnesota are 4.1 per cent, 9.8 per cent and 5.3 per cent respectively.

	Minnesota			United States		
	Acres improved land*	Horses & mules (2 yrs. & over) Total	Per 1000 acres improved land	Acres improved land*	Horses & mules (2 yrs. & over) Total	Per 1000 acres improved land
1900	18,443	606,470	32.9	414,498	18,770,581	45.3
1910	19,644	680,072	34.6	478,452	21,640,187	45.2
1920	21,482	834,088	38.8	503,073	21,872,594	43.4
1925	20,808	799,603	38.4	506,068	20,639,484	40.8

*000 omitted

A further analysis presented in the table above shows that since this decrease was so largely confined to colts we still have plenty of work horses. In Minnesota we have more horses per 1000 acres of crop land than we did in either 1900 or 1910. Apparently farms were overstocked in 1920. The situation for the United States is reversed but still not such as to indicate a horse shortage. During this period there has been a considerable substitution of motor power for horse power both in the cities and on farms. The number of tractors on farms in the United States according to the preliminary 1925 census figures for twenty-nine states has more than doubled since 1920. In Minnesota farm tractors increased from 14,794 in 1920 to 25,558 in 1925. Trucks are finding increasing use for farm hauling, particularly in the marketing of farm products.

Automobiles are also replacing the horse for many operations. The farmer saves time as well as horse flesh by using his car for miscellaneous trips such as marketing cream and eggs, buying groceries and light supplies and attending to business matters in town and elsewhere. For personal and pleasure driving "Old Dobbin" has almost completely given place to the popular #flivver." In cities, too, horses are being supplanted. Large cities such as New York, Chicago, Boston, Philadelphia and Baltimore show a yearly decrease in horses of five to six per cent annually for the past fifteen years.

Since less horse work is required on the farm than formerly and since the city demand is diminishing it is quite possible that this reduction of the horse supply may continue further without handicapping the operation of our farms. That reduction is being made is apparent from the following table.

Colts Foaled per 1000 Horses and Mules on Farms and Ranges

	U.S. Census					Farms of Crop Reporters						
	1890	1900	1910	1920	1925	1920	1921	1922	1923	1924	1925	1926
Minnesota	122	66	85	50	30	76	63	49	36	36	32	36
United States	115	72	88	63	37	91	83	71	60	49	44	41

Assuming the average life of a horse to be fifteen years it is necessary to raise at least 67 colts each year per 1000 head of horses in order just to maintain our present supply. For six years at least, less than this number have been raised. Some caution should now be observed to prevent this readjustment from going too far. Changes in the horse supply can be made only slowly. It takes four years to produce a work horse after the farmer decides its production is desirable.

As a result of decreased colt production the proportion of old horses on farms is increasing. Estimates of the Department of Agriculture indicate that in 1925 only 10 per cent of all horses in Minnesota were under four years of age, 45 per cent were from four to nine years and 45 per cent were ten years or older. The younger groups must be depended on for breeding purposes. A mare ten years old that has never been bred can not be depended on as a brood mare. It should also be remembered that as less attention is given to horse breeding there is likely to be less attention as well to the quality of breeding stock. This is particularly true of stallions. Stallion owners can not afford to maintain the best individuals in the face of a greatly reduced demand for their services. It is inadvisable to let either the quality or numbers of prospective breeding stock run too low.

In view of the various factors affecting the horse situation, one can safely conclude that there are plenty of horses on farms at the present time. In Minnesota there are probably more than are needed immediately. However, because of the growing shortage of young brood mares and the length of time required to produce a work horse it is important to look ahead to future needs. It is probably time to breed more good young mares. This, however, should be done with the idea of maintaining the present supply, possibly on a somewhat reduced basis, and not with the object of expanding the horse industry.

Feed and Labor Requirements for Work Horses

Any discussion of the number of horses needed to operate our farms is not complete without some consideration of the costs of maintaining these horses. Since little cash outlay is involved few farmers realize just what it costs them to maintain their work stock. It was found on the statistical routes at Windom and Owatonna that the work horses received an annual average of 3300 pounds of grain, 2½ tons of hay and 60 days of pasture. In addition to the hay most of these horses received straw during the winter months. Eighty-five hours were spent annually in caring for each horse. On the basis of average state yields of crops for the past ten years it would have required approximately 4½ acres to feed one horse for a year. Each farm in this state keeps about four work horses. These consume the entire product of eighteen acres of land and require the services of one man full time for five weeks to feed and care for them. This amounts to 14 per cent of the improved land of the farm and nearly 10 per cent of the farmer's time. The farmer may well devote much time to a study of economies in horse maintenance and to planning his operations so as to reduce his horse requirements to the lowest point consistent with the profitable operation of his farm.

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