

DAIRYING IN NORTHERN MINNESOTA.

We call attention, for the third time in this edition of *The Pioneer*, to the abundance and nutriment of the tame and wild grasses which thrive in this portion of Minnesota, in order that we may convince the prospective dairyman and stockraiser of the possibilities open to him as to these two industries.

The following official excerpts denote the availability of this portion of the state as a dairying and stockraising center, and appended will be found official reports from the state immigration office. They offer food for reflection to the prospective home-seeker.

From A. J. McGuire, superintendent of the North-East Experimental farm at Grand Rapids, and who is a recognized authority on dairying, we have the following:

"The state legislature of 1895 passed a bill providing for a dairying experiment station for Northeastern Minnesota. Grand Rapids was chosen for the location. A Minneapolis firm in sympathy with the movement later donated 80 acres, making 155 acres in all.

"The Experiment Farm was opened during the spring of 1896 under supervision of Warren W. Pendergast, a graduate of the school and college of agriculture of the University of Minnesota. The state established the Experiment Farm in order to determine the dairying possibilities of the country, and to work out a system of farming that would be practical and most profitable under the natural conditions peculiar to Northeastern Minnesota.

"The strongest endorsement of the agricultural merits of the county is in the growth of clover. This wonderful plant, so difficult to grow in some sections of the state, finds a native habitation in North-central Minnesota, and especially Beltrami county, and yields as high as four tons of cured hay per acre at a single cutting. A twelve acre field on the Experiment Farm that had only its natural fertility, having never been manured, yielded 3¾ tons of cured hay per acre in a cutting in 1906, and the following year (1907), 3.65 tons per acre. When it is considered that two tons of hay per acre is considered a large yield, the possible prodigality of milk and butter production is indeed wonderful.

"The great value of clover is not so much in its production of feed as in its effect upon the soil. Clover leaves the soil richer, having the power to draw an element of fertility (nitrogen) from the air, and leaves it in the soil stored in its abundant roots.

"But this is another story. With the exception of corn safely maturing, every crop that is essential to successful dairying and farming has been grown on the Experiment Farm with good results. While corn as yet may not be grown successfully for grain, it produces excellent fodder, and for this purpose from ten to fifteen acres is grown on the Experiment Farm every year. It is used for both fodder and ensilage, yielding from 5 to 8 tons per acre of cured fodder, and from 10 to 15 tons per acre of ensilage.

"All kinds of root crops find the soil and climatic conditions of Northeastern Minnesota especially favorable to their growth. Potatoes is the great money-making crop for the farmer of few acres under cultivation. Stock roots, such as carrots, mangles, and rutabagas yield from 12 to 20 tons per acre. Roots may be made to take the

place of grain to a large extent in feeding live stock in the winter, and their food value in comparison with high priced grain makes them a valuable crop.

"There are two very good reasons for advocating dairying in a country so favorable to that industry as Northeastern Minnesota. The dairy cow is the most productive of all farm animals, and in dairying less of the soil fertility is removed than

North-central Minnesota, through the persistent and able efforts of Mr. McGuire, now in charge of the station, and all of them, having sufficient patronage, paid over 27 cents per pound for butter fat during the past year."

To indicate the value of the dairy products of this portion of the state, *The Pioneer* need but say that of all the creameries in Minnesota their product is



A. J. MCGUIRE,

Superintendent of Northeast Experiment Farm, who has done much for the Dairying and Farming Interests of Northern Minnesota.

in any other branch of agriculture. The demonstration of this may be seen in the fact that the dairy farmers are the most prosperous the world over, whether in Minnesota, Vermont or Denmark.

"In this section of the state where the acres under cultivation must necessarily be few, what crops are grown should be made the best possible use of, and that is in feeding. Feeding on the farm, and selling a finished product, and butter is the highest finished product of the farm. The creameries that have been established in

annually contracted for by the merchants of New York, Philadelphia, Baltimore and other eastern centers of importance, thus securing the highest market price for every pound of butter that is shipped.

In a certain town of this section of the state located in a community where the farmers have gone into dairying, the bank paid out over \$80,000.00 for cream checks; over \$7,000.00 a month during 1907. In this same town five years ago, before the farmers had a creamery, and made a business of dairying, they did not receive a dollar