covered with a scattered growth of trees and brush and is used for permanent pasture land.

**DUNE SAND**

Dune sand is gray, loose, porous, wind-blown sand or fine sand to a depth of 36 or more inches. It is mapped mainly in a narrow strip, ranging in width from a few rods to nearly half a mile, on the shore of Lake Michigan. The relief is hummocky or billowy. The soil is generally barren but in some places is covered with a sparse growth of sand grass. Some of it was at one time covered with white pine. This sand is too sterile to be of any value for farming. None of it is cultivated.

**SUMMARY**

Manitowoc County is in the east-central part of Wisconsin, bordering Lake Michigan. It comprises an area of 590 square miles, or 377,600 acres. The land surface ranges from level to rough and hilly. The most conspicuous feature is the Kettle Range, a glacial moraine crossing the county from southwest to northeast. The highest elevation in the county is about 359 feet above Lake Michigan. Drainage is all into Lake Michigan.

The climatic conditions are favorable to the high development of agriculture. The frost-free season at Manitowoc averages 162 days. Inland the season is somewhat shorter.

Manitowoc County lies wholly within the timbered region, and the soils have developed under a heavy forest cover. The soils naturally fall into two major groups, the mature soils and the immature soils. The first group includes the well-drained upland soils and the better-drained soils on old glacial-lake areas and alluvial terraces. These soils are mapped in the Kewaunee, Bellefontaine, Fox, Plainfield, and Superior series. The immature soils, which do not show a complete profile, are mapped in the Genesee, Ewen, Wabash, Poygan, Clyde, Maumee, Granby, Saugatuck, Bridgman, Coloma, and Longrie series, and in the miscellaneous classifications rough broken land, dune sand, and muck and peat.

The agriculture of Manitowoc County is highly developed. Dairying is the chief branch of farming. American cheese is the chief dairy product. The chief crops grown are hay, corn, oats, barley, alfalfa, and peas, and some sugar beets, potatoes, and truck crops are produced. Poultry raising is rather important. Fruit is not grown extensively.

The county is well supplied with transportation facilities. The highways are for the most part well improved, most of them being surfaced with cement, crushed rock, or gravel. All parts of the county are supplied with rural mail service and telephones. Farm buildings are substantial, well built, and usually kept in good repair.

In brief, Manitowoc County is an up-to-date highly prosperous agricultural community.