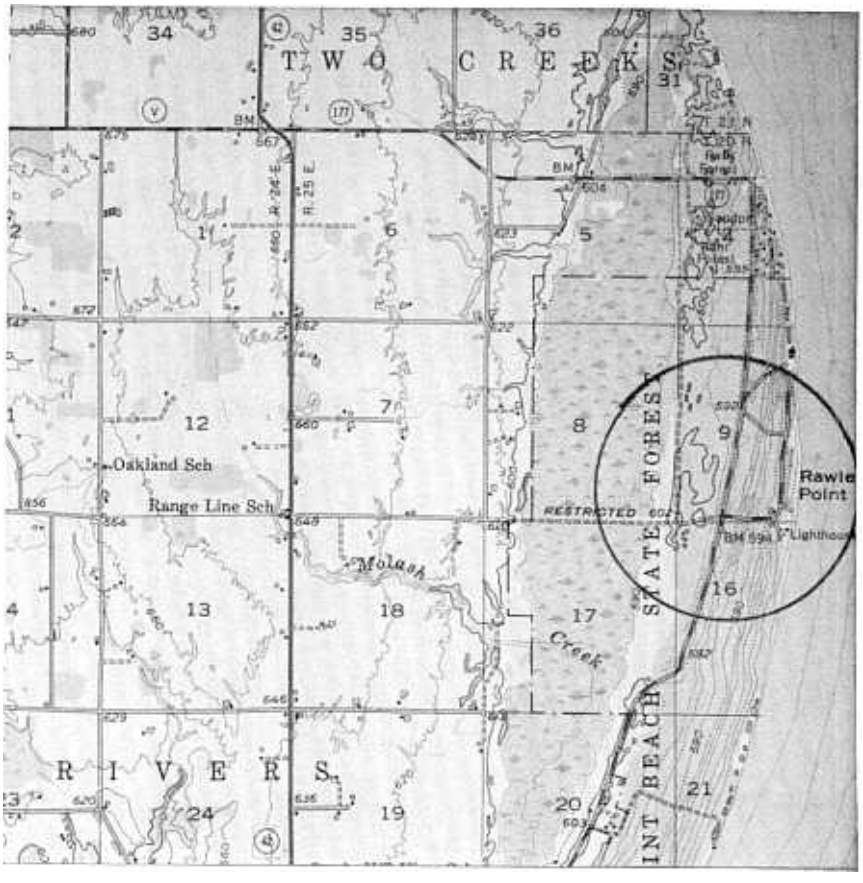
Title: Point Beach State Forest

Location: T. 20 N., R. 25 E., Manitowoc 15' Quadrangle, Manitowoc County. Enter park from Two Rivers (south end) or on Hwy. 172 from Hwy. 42 north of Two Rivers. Park just inside main entrance gate and walk to beach.



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Description: This is one of the few areas where natural accretion or deposition along the shoreline is taking place in Wisconsin. You probably noted the ridges and swales parallel to the shoreline which you crossed coming into the park. All of them are old beaches (primarily fore dunes) deposited along shorelines during the last 8,000, or so, years. Note that you crossed somewhat stabilized dunes in walking to the beach. These are composed of sand blown off the beach face by onshore winds. The dunes appear to be stable but it is a fragile environment and slight changes in vegetation caused by fire, climate change or man's activities could produce an active dune field.

On the beach itself, note that the materials are sand. The sand is derived from erosion of bluffs and entering streams to the north and to a lesser extent from the south. The sand is transported by currents moving along shore pushed by the prevailing winds and by the movement of sand grains along shore by waves hitting the beach at an angle. The distribution of currents in the lake causes sand to accumulate here instead of being carried further along shore. If there are waves when you visit you can observe this longshore drift.

Examine the sand in the beach by looking at a cut face. Note that layering or stratification in the sand has been produced by wave action. The stratification here is produced by alternating lighter (color and weight) layers of grains of primarily quartz and calcium carbonate (limestone) grains and layers of heavier and darker grains of magnetite and hematite (iron oxide), garnets, illmenite and others.

Significance: Contrast this area with those seen in most places along the coast where the shore is being eroded. Outline the variables that might determine whether erosion or deposition takes place.

References: DuBois, 1973