Unusual Features of the Upland Sector at Sleeping Bear Dunes

Introduction

When the acreage of the original proposed Sleeping Bear Dunes park was decreased, Congress established a series of scenic corridors in the deleted areas. These corridors were routed to give the public access to scenic overlooks and to areas possessing unusual natural features. In the northern section of the park three principal areas are involved: Miller Ridge, Bow Lake sector and the Giant Kettle area. It is evident that Congress intended that these exceptional areas be acquired and preserved.

The Sleeping Bear Dunelands contain four outstanding types of natural features: dunes, superb natural scenery, glacial geological features and ecological communities. The first two of these have been widely recognized but the last two have been frequently overlooked. The Sleeping Bear Dunes area possesses one of the best collections of glacial geological features in the country— including impressive moraines, ancient river systems, glacial lake beaches and terraces, ice-block lakes and valleys, outwash plains, embayment areas, kettle and kames, drainage channels and ancient dune complexes.

Two types of natural areas are particularly evident in the area— duneland communities and beech-maple hardwood forests. The dune communities include a wide variety of types associated with a number of different terrains. The hardwood forests found here rate among the best in the country. These are characterized by an unusually rich spring flora consisting of a wide variety of species. Of interest are pure stands of beech and the dune forest element which develops adjacent to major dune systems. It is these forests which furnish the most spectacular foliage colors during the autumn season. Other kinds of ecological communities are: cedar swamps, bogs, lowland meadows, swamp forests, cattail marshes, pine plains, swales and lake and stream communities. The above glacial and ecological features are valuable educational facilities that offer an opportunity for an excellent interpretive program to make the public aware of the basic relationships of these natural features and their exceptional values.

Miller Ridge

Miller Ridge is a very impressive portion of the Manistee Moraine. Because of its 400 ft. height and its location, a number of excellent scenic overlooks are situated along the top of its western border. In different spots totally different views are observed including overlooks of Glen Lake, Sleeping Bear Dunes, Sleeping Bear Bay and the Manistou Islands. Conversely, as distant views are available along the ridge, if houses are built at these overlooks they can be seen from many locations within the park and will change the prevailing atmosphere which at present is one of undisturbed natural landscape. For this reason it is imperative to acquire these observation points which are not now in park ownership. For example, the area along the ridge north of Cheney road is in private ownership. Pruning of trees at this location at the top of the bluffs would furnish an outstanding view of Glen Lake which is not possible in other areas to the north. Objections have been raised at the present major overlook because powerlines interfere with photography of the scenery.

An entirely different view of the Lake Michigan scenery— especially to the north—is available from Juniper Ridge located near the intersection of Miller and Hyland Roads. A low observation platform here as well as in other overlooks would extend the range of view. The many low juniper found along Juniper Ridge provide an interesting view. A large colony of ground cedar (lycophodium tristachyum) —one of the rarer species of this group—is also of interest.

The above overlooks are of great value for interpretive purposes because many of the distinctive glacial geological features can be seen and compared from these vantage points and their character and relationships can be ideally demonstrated. It should be pointed out that the large trees that now line the east border of Miller Road are in private ownership and cutting of this natural border could not be prevented. Also clearing of trees and vegetation along the edge of the bluffs for construction of houses in such areas if left in private ownership could lead to severe erosion problems because of the steep terrain.
At the base of Juniper Ridge to the south is the head of a very unusual glacial valley which extends for a distance of two miles to the southeast. Its steep sides, over two hundred feet high are covered with a rich mesic forest. Very few such valleys of this length and character exist in this region. The side ravines that enter the valley furnish an excellent route from which to observe the change in the forest structure as one descends into the lower levels. A rich spring flora covers the forest floor. Of interest on the valley floor are the development of large beech trees and small stands of pure hemlock. Unfortunately the private road which has recently been constructed along Juniper Ridge leads into the head of the unique valley and opens it up to possible abuse and destruction unless the road can be blocked.

Bow Lake Sector

This area lying between County Hwy. 616 and Zaatz Road and to the west of County Hwy. 669 possesses not only a number of unusual geological features but also several interesting and diverse wetland communities. Of special interest is the giant ice-block depression 400 ft. deep with very steep slopes, extending more than one half mile in length. Bow Lake and its sister lake are open marl lakes lying in the valley. Extensive deposits of marl flank their borders. Kalm lobelia- an indicator of calcareous condition grows along these shores. Wet meadows, rush communities and cedar swamps are other types of wetlands found in the valley. Located close together and differing in character they provide distinctive interpretive features for study and comparison.

To the south of the above valley lies an extensive area of kames and kettles possessing extremely rugged topography, undoubtedly formed by interlobate glacial ice. A number of pothole ponds and a mature leatherleaf bog are wetlands of interest in this area. The above glacial features and the wetland communities are well suited for interpretive purposes. The location on County Hwy. 669 a quarter mile north of Zaatz Road exhibits an impressive contrast between the flat outwash plain to the east and the deep rugged glacial valley immediately west of the road. Many of the features described above are not found in other areas of the park.

The entire area is heavily wooded,- a large portion being covered with hardwood forest. A number of pure hemlock stands and beautiful sections of white birch occupy some portion of the steep valley slopes. Of interest are the unusually large colonies of maidenhair fern. The steep hillsides provide a number of scenic vistas and in autumn ideally display the colorful fall foliage. This area with its rich forests, its diverse ecological communities, its rugged topography and its natural isolation is the wildest sector of the park and the best suited as a preserve for wildlife. A few carefully routed trails would provide access to points of interest for interpretive purposes and for wilderness hiking.

Ginseng (Panax quinquefolia)- a species on the Michigan rare and endangered plant list- grows here.

Giant Kettle Area

The high morainal hill located west of County Hwy. 675 along the north side of Hwy. K-72 is one of the highest elevations in the county. Most of its slopes and the area to the north are covered with a rich mesic forest including an excellent ground cover of spring flowering species. The area already contains beech trees of impressive size and has the future potential of trees of even greater size if protected. Of unusual interest is a deep glacial kettle- over 100 ft. deep- shaped like an inverted cone. Kettles of this depth and shape are rare. The flade fern (Athyrium pycnocarpon) grows in the kettle.

The shoulder of the hill not only provides scenic vistas of the surrounding area but also a view of the extensive outwash plain and its bordering ridges to the east. These features and the giant kettle provide material for interpretive purposes.