A REPORT OF FEASIBILITY FOR TWO AREAS
IN
SLEEPING BEAR DUNES NATIONAL LAKE SHORE

Prepared for
National Park Service
Sleeping Bear Dunes National Lakeshore
Frankfort, Michigan

By:
Paul H. Risk, Ph.D.
Assistant Professor and
Coordinator for Environmental
Interpretation
Department of Park and Recreation
Resources
Michigan State University

Current Address:
Paul H. Risk, Ph.D.
Associate Professor
Recreation and Parks
The Pennsylvania State University
267 Recreation Building
University Park, PA 16802
Introduction

The region along the Leelanau Peninsula which comprises Sleeping Bear Dunes National Lakeshore and/or was included as part of early proposals for inclusion represents landscape, geological and biological features of wide diversity. Dune areas of several types, glacial topography including kames and kettles as well as outwash plains, ancient glacial streambeds and other features alternate with hardwood forests, pine stands, swamp forests and bogs. Ecological successional changes are clearly in evidence and lend additional significance to the region. The extensive variety of landforms and ecological niches provides opportunities for many varieties of plants—estimated by some as approaching 1000 species, some of which are considered rare.

Bow Lake/Bog Area Valley Complex

Extending south from Bow Lake for almost two miles is a scenic, deeply glaciated valley complex. At the present time, the highway passes along one edge and private residences are encroaching upon the opposite ridge. Yet, the valley itself remains an island of pleasant isolation filled with fascinating features. This separation from humanity is maintained by the depth and relative inaccessibility of the valley.
At the northern end of the valley, nearest Bow Lake, small marl-bottomed lakes are well developed and successional changes are evident from bog with floating mat vegetation to cedar and birch. Numerous spring-fed rivulets lace the valley. And, an old logging road along the east bottom of the valley provides a logical access for hikers. In several locations through the valley the ground is covered with maiden-hair fern.

At the southern end of the valley, a well defined bog covered with a floating mat of sedge, sphagnum and leatherleaf vegetation in which cranberries abound provides a significant feature. Toward one end of the boggy area a large stand of cedars is being flooded out demonstrating another of the successional changes evident in the area.

Perhaps two major considerations are important as they relate to this section. The first is recreational-scenic and the second is interpretive-educational.

1. **Recreational-scenic**
   
   As previously mentioned, the valley with its contained lakes, streams and vegetation, due to the physiography of the area provides a natural isolation, peace and tranquility not found in much of the remainder of the Lakeshore. Visitors are sheltered from both the sights and sounds of humanity and human works. Very probably, the rugged aspect of the valley complex has been a limiting factor which has successfully protected it from encroachment of residences or other structures.
beyond the eastern margin. Although large, open vistas available in other parts of the Lakeshore are not present, this aspect in fact lends to the area a large part of its value. Here it is possible, with little inconvenience, for visitors to completely sever their contact with others and obtain a sense of pleasant removal from conflicting sights and sounds.

The dense vegetation throughout the valley also contributes to the sense of physical removal from civilization and is in large measure responsible for the beauty of the valley complex.

2. **Interpretive-educational**

It is rare to find in so restricted an area such diversity of conditions. Successional changes which are so clearly evident, coupled with the wide variety of plants results in the area being one of great potential from the standpoint of environmental interpretation for the visitor and environmental education on a more formal basis. The Glen Lake School at the north end of the valley is in an ideal location to take advantage of the educational potential which the valley complex represents. A walk from the north to the south ends of the valley can, in an extremely short time expose students and visitors to an easily understood and visualized series of examples of great ecological significance. Bogs alone represent a biological condition which many people have never viewed and due to the unusual plant types which exist in such an area together with the unique experience of standing on a mat of floating vegetation represent an important opportunity.
But, it should be held strongly in mind that much of the essence of the value of the area lies in its primitive condition. Any effort to interpret it should involve minimal impact on conditions as they now exist. Signing should be kept to an absolute minimum and limited to approaches only. Access should be by foot only and trails maintained in as natural a manner as possible hopefully following the existing old road trace. No effort should be made to surface trails through the valley.

**Glacial Kettle**

Southwest of the Bow Lake Valley Complex is found a spectacular glacial kettle remaining after a huge ice block melted. Almost 100 feet deep and approximately 150-200 feet wide, the almost perfectly circular feature represents a fascinating expansion of the story of glaciation.

Easily accessible from one of the main roads in the area, the kettle represents an interpretive-educational opportunity of great importance while also exhibiting less fragility in terms of visitor impact than the Bow Lake Valley. Conceivably, vehicular access could be developed via a primitive road. But, it would be most desirable to limit access to foot travel.

At the highway a wayside exhibit would be an ideal way to identify the entry point and also assist visitors in comprehending the kettle's formational story.
Presently, the kettle is heavily forested, making it difficult to see. Future development should include some clearing to facilitate views of the feature. Further, dumping of trash has occurred into one side of the depression and this material would have to be removed.

Easy access combined with proximity to other portions of the glacial story of Sleeping Bear enhance the kettle's importance to the overall Lakeshore interpretive-educational format and accentuate the importance of the inclusion of this feature under NPS protection.

**Overview Considerations**

Sleeping Bear Dunes National Lakeshore has been the subject of considerable debate for a number of years. Proponents have suggested that under private ownership the important natural, historic and scenic features of the region would not be preserved. Opponents have, often heatedly, taken the position that by "having their cake and eating it too" preservation would still be possible. Frankly, the history of private land ownership as it relates to the preservation both of such areas and of the atmosphere or essence of the experience has clearly indicated low success. Too frequently, encroachment and destruction often speeded by human greed as real estate values soared, have spelled the end of the beauty and peace of such lands. In fact, there is ample evidence currently existing in the Sleeping Bear area of just such thoughtless expansion. And, there is no reason to suppose that in the absence of National Park Service protection undesirable developments would be adequately controlled.
Probably the most apparent and well known features in the Sleeping Bear area are the dunes. Yet they represent only a small part of the entire picture of geological change here. Therefore, the areas discussed in this report take on increased importance as a means for expanding the visitor's understanding and appreciation of the complex sequence of events which have combined to produce this unusual region called Sleeping Bear Dunes National Lakeshore. Protection by inclusion in the National Lakeshore seems to be of paramount importance.

While there will be those who feel that such protection is unwarranted, there is no doubt that future generations for whom these areas have been protected will praise highly the foresight demonstrated by those of us who today take steps to assure the greatest good for the greatest number of people. Failure to include these areas will contrastingly be viewed as a glaring error.

LM3/1