

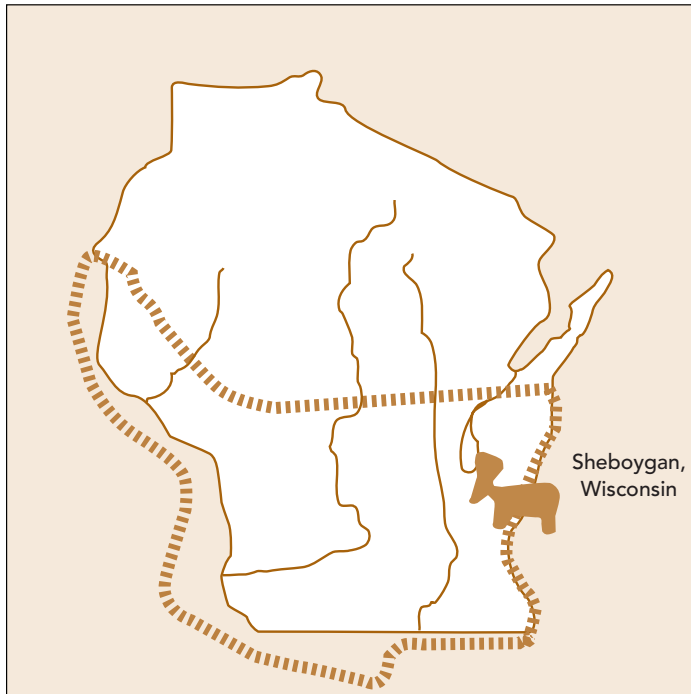


SHEBOYGAN
INDIAN MOUND
PARK

History and
Nature Trail Guide

Area of the Effigy Mound Culture

500-1000 A.D.



SHEBOYGAN INDIAN MOUND PARK

Dedicated by City of Sheboygan as an archeological park—1966

Wisconsin Historic Site—1968

Sheboygan County Landmark—1977

KLETZIEN MOUND GROUP

National Register of Historic Places—July 1981

The State Historical Society of Wisconsin Certificate of Commendation for
Preservation to Town and Country Garden Club—1997

PREFACE

“REMOVE NOT THE ANCIENT LANDMARK”

– PROVERBS 22:28

The Sheboygan Indian Mound Park, a natural and historic resource, is the sacred burial ground of our Native Americans who built the effigy mounds on this site over 1000 years ago. By means of an Effigy Mound Trail and a Nature Trail we have projected yet another aspect—another reason why this site must be preserved. It is an ideal setting to stimulate interest in further study of our great heritage, which is both natural and cultural, in the hope that a land ethic, “that man is part of, not apart from, nature,” might be implanted.

All of us are fortunate to have such a beautiful woodland park where the effigy mounds themselves are proof of a man-nature relationship. We are fortunate that the people in the past preserved the area for us. Let it be the wish of all of us to perpetuate it for the people of the future. The Sheboygan Indian Mound Park is a sacred place. We who live here now should so honor it.

Mary T. Knauf
Town and Country Garden Club
Civic Chairman 1981

ACKNOWLEDGEMENTS

The conservation, restoration and preservation of Sheboygan Indian Mound Park has required the expertise and efforts of many individuals and organizations in the community.

“Save the Mounds” crusaders

Edgewater Garden Club, Evergreen Junior Garden Club, Falls Riverview Garden Club, Ivy League Garden Club, Juniper Garden Club, Lake Shore Garden Club, Lone Pine High School Gardeners, Sheboygan Garden Club, Town and Country Garden Club and
The Sheboygan Press

Milwaukee Public Museum
Dr. Stephen Borhegi, Director
Dr. Robert Ritzenthaler, Curator of Anthropology

Kermit Freckman, archaeologist
Dr. Thomas Grittinger, biologist
Lee Olsen, ethnobotanist

City of Sheboygan
City Engineers
City Development
Park Department
Gerald Wehmeyer, Park Superintendent and City Forester
Paul Meyer, Superintendent Parks, Forestry and Cemetery

The volunteer Seabees, Construction Battalion of the U.S. Navy

Wisconsin Conservation Corps

Gifts in memory of Mr. and Mrs. John M. Kohler III
Memorial gift from the family of Mr. Harley Lyon

The continuing commitment of Town and Country Garden Club, Inc.
Indian Mound Park Committee and club members



INTRODUCTION

THE PEOPLE

Many tribes of people have passed through this land, our Mother Earth. They have all acknowledged her as their mother and the animal and plant people as their brothers and sisters. The Menominee and Ho-Chunk (also known as Winnebago) peoples have lived on this land as long as our memory can record, but the Land remembers even to remote pasts when effigy mound people lived here with their tree brothers. All lived intimately with the plants and animals. Every plant has its own particular virtue and powers—every plant has a spiritual nature and purpose. Nothing was taken from Mother Earth without giving back something in return. The virtues and effectiveness of the tree people are different in each area, but the needs of all men remain the same—food, drink, medicine, utility, and the need for ceremony, the need to care for the health of the living, and the need to honor the dead.

– Lee Olsen
ethnobotanist



THE HUMAN STORY OF WHICH WE ARE A PART

by MARY T. KNAUF

Wisconsin was fully clothed with vegetation during each interglacial interval, and the plant communities which occurred were similar to those plants we have today. After the last glaciation some people came into Wisconsin's dense wilderness. They were the beginning of the human story of which we are a part. There are sites that attest to their presence about 2000 years ago, but the most fascinating sites are those that have effigy mounds.

Over 1000 years ago a group of people known as the Effigy Mound builders came to the Black River area of Sheboygan County. Their name is derived from their practice of constructing low earthen burial mounds in the shape of birds, reptiles, and mammals. They also built mounds in linear, oval, and conical forms. Radiocarbon dating establishes their culture's existence between 500 and 1000 A.D. Little is known about these Native Americans who migrated to and from this area; however, it is accepted that they were nomadic hunters and food gatherers. The effigy burial mounds, unique in the world, are found predominantly in southern Wisconsin with a few in adjacent areas of Minnesota, Iowa, and Illinois. Estimates of the number of effigies that were built in Wisconsin are in the thousands, but due to the plow and the bulldozer only hundreds are left. The symbolism of the effigies will never really be known, but they do suggest a man-nature relationship. The fate of the effigy builders is also unknown, because nothing was ever found to explain their disappearance.

Before the white man came, the vegetation in Wisconsin was largely a result of the soil, topography, climate, and slowly changing series of Indian populations. The aboriginal Indians influenced the nature of the vegetation by their use of fire, by killing of large mammals that affected the vegetation, by food gathering that influenced some of the plants harvested, and by plant introduction. Fire changed the vegetational complex more than all the other influences combined.

EARLY SETTLERS OF SHEBOYGAN COUNTY

In the late 1700s the Europeans found the Sheboygan County virgin forests with their abundance of fur-bearing animals. They traded blankets, materials, knives, axes, etc., in return for maple sugar and furs from the Indians. The first fur trading post was established in 1795 and many others followed, but by 1832 few fur-bearing animals were left. In the same year the

last Indian resistance in Wisconsin was broken by the Black Hawk War, and this territory became a part of the national government. The early settlers arrived, and by 1850 lumbering had become a business in every section of the county. In 1884 most of the good timber was gone. In less than 100 years the biological community of the county was severely changed, but the Indian Mound Park, although in second growth, remains relatively undisturbed.

The early settlers influenced the plant communities by introducing their methods of providing for their needs from the land. They substituted the axe, plow, and cow for effective control in place of the Indian use of fire. Their efforts at fire prevention to protect their own land, their building of roads and plowing of fields, plus the movement of Indians to designated areas, all resulted in the elimination of the terrible running grass fires of the past. It was the white man's most important vegetational influence, but unlike the Indian who tended to leave the soil well covered with vegetation, he tended to destroy it for his agricultural fields which opened the soil to the evils of erosion. Scientific and technical programs to reverse this action have been instituted. Ironically, the Indian reverence for the land is what these programs stress.

NINETEENTH-CENTURY LAND OWNERSHIP

Sheboygan County was surveyed between 1833 and 1836 by the same rectangular system still used today in the United States. Because of virgin forest and vegetation density, the trees and other surface features were used to designate site markers. The survey of the Indian mounds area was directed by H. Burnham in 1835. He lists the following trees with diameters: sugar maple 20", birch 7" and 14", white ash 24", yellow birch 12", and pine 18" and 28". He also listed a creek, a NE Indian trail a few blocks to the east and a NW-NE trail to the west.

Land auctions for the county property started in 1836 and were conducted at the U.S. Land Office in Chicago, Illinois, and later in Green Bay, Wisconsin. They were scheduled and advertised well in advance of the date. Although some hardy people ventured through the wilderness to view the land, most of it was purchased sight unseen, mainly for homesteading, lumbering or land speculation. On August 13, 1836, Peter Van Dorn of Tompkins County, New York, became the Sheboygan Indian Mound Park's first landowner when he purchased 160 acres that included the park area. His ownership is substantiated by county abstract records and a legal document from Martin Van Buren, President of the United States, but no other mention of him can be found in local records, and it is assumed that he lived elsewhere. Between 1836 and 1892 the property changed hands many times, but for the next 30 years, 1892-1922, John Wissink, a bachelor, owned the land and lived on a section adjacent to the park.

INDIAN MOUND HISTORY CIRCA 1920

It is assumed that the Indian mounds were noticed or known by most of the landowners for they were well-known to local students of archaeology. Before 1920 the 34 mounds were roughly charted by a physician from Miladore, Wisconsin, Dr. Alphonse Gerend, who gave them the name of Black River Group No.2.

On December 12, 1922, Adam Kletzien of Sheboygan purchased a 60 acre tract from John Wissink that included 29 of the mounds. In 1927 an archaeological field staff, directed by W.C. McKern of the Milwaukee Public Museum, designated them as the Kletzien Group by which name they are known today. The field staff studied, photographed, numbered, and catalogued the 34 mounds but only partially excavated 26. All were found to be of the Effigy Mound culture. Although one mound was an intaglio, without burial, no other intaglio foundations were found.

Adam Kletzien protected the area of the mounds, and although he cut timber and cleared some of the land for his family use, he never cut a tree from the mound area. His concern for the mounds is substantiated in W.C. McKern's report, "An expressed desire of the property owner (Mr. Kletzien) to have the mounds finally restored made it advisable to employ a trenching rather than a removable method of excavation. Trees growing here and there on the mounds rendered excavation difficult since their removal was prohibited."

1927 McKERN REPORT: EFFIGY MOUND DESCRIPTION

MOUND NUMBER	CLASSIFICATION	TOTAL
1, 5*, 6, 10, 13, 14, 27	Deer	7
2, 3, 7, 11*, 30, intaglio#, 31*, 32*	Panther	7
9#, 15, 16, 17, 24, 26, 29	Effigies Unclassified	7
8, 12, 23, 33#	Linear	4
19, 25	Oval	2
20*, 21, 22*, 34	Conical	4
4, 18#, 28*	Indetermine	<u>3</u>
		34

*Mounds not excavated

#Mounds partially removed before 1927

Synopsis of McKern Description of Deer Effigy Mound 10 (still found in the park today): adult male person flexed in flesh, head to NW, legs SW. Mound size 36.5' length x 19.5' width. Burial marked X found in sub-floor in oval pit measuring 2.5' x 4'. Materials and sub-floor typical of site.



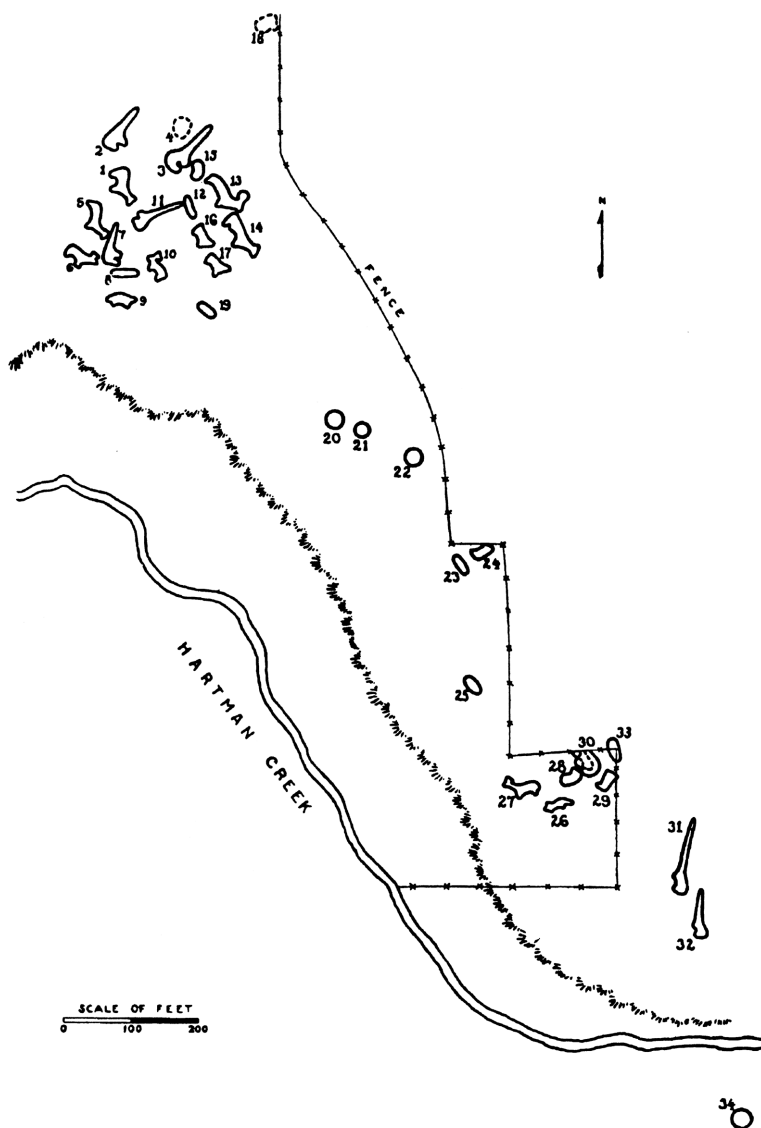
Other body lengths of the deer effigies varied from 36' to 72' in length and from 19' to 27' in width. The panther effigies with tails included varied from 67' to 115' in length and from 24' to 39' in width. All the mounds were low, ranging from one to three feet in height.

The McKern report states: "Artifacts were not uncommonly buried with the dead, and in instances, large pots were deliberately broken into many parts and placed in graves. Among the bone and stone artifacts made and used were chipped stone projectile points of various common shapes with matched varieties predominating: awls, fleshers, and harpoon points of bone, including some finely worked specimens; pottery vessels and pipes of uniform purposes.

"The procedure in building these specially floored mounds seems to have been as follows. The surface of an area conforming in outline to the lateral contours of the intended mound was cleaned of grass and all surface discoloring. A mucky swamp sand was then brought to the site, still in a wet state and spread over this cleaned area to a depth of several inches. Brush or other inflammable materials were then spread over this floor and burnt. The ashes and charcoal were then removed from the immediate spot selected as the resting place for the dead. The body was placed in this spot and earth from the adjacent surface was loosened and heaped up over the dead to comprise the effigy mound. This entire procedure suggests a carefully executed ceremony accompanying burial, as indeed the shapes of the mounds themselves suggest."

The number of bodies found in a single mound varied between one and two; most of them were in a flexed position with arms and legs over the chest. Studies of their bones and skulls indicate that these people did not practice the so-called “cradleboard deformation,” which means they did not have the typical malformation caused by tightly strapping a baby to a cradleboard or baby carrier, as was the common practice of Indian tribes of a later period. The clay artifacts found in the mounds were the pottery type known to be typical of the Effigy Mound culture. The great majority of vessels was decorated and had a simple geometric design confined to the rim or lip area. Taking into consideration the crude objects found and the absence of agricultural implements in the mounds and finding no signs that they had permanent villages, it is accepted that these people were nomadic hunters and gatherers.





KLETZIEN MOUND GROUP
As numbered in 1927

Courtesy of Milwaukee Public Museum
 of Milwaukee County

ESTABLISHING INDIAN MOUND PARK

By 1952, when Adam Kletzien gave his property to his three sons, one mound on his land and five mounds on adjacent property had been lost to the plow or the bulldozer. After 1952 some of the Kletzien property was sold, and ten more mounds were subsequently destroyed.

In 1958 Juniper Garden Club, which initiated the "Save the Mounds" crusade, alerted other Sheboygan County garden clubs of a plan to subdivide more of the property and thereby destroy the 18 remaining mounds. Unable to get municipal funds to meet the developer's four month deadline, the clubs sponsored a public auction, gave weekly tours of the area, held garden walks, and with the support of *The Sheboygan Press* collected over 600 donations for the \$15,362 needed to purchase the 15.48 acres.

When the land was given to the City of Sheboygan in 1960 for an archaeological park, the mounds were only humps from which sprouted saplings, brambles and weeds. In order that the work of restoration be done authentically, the Milwaukee Public Museum Director, Dr. Stephen Borhegi, and the Museum's Curator of Anthropology, Dr. Robert Ritzenthaler, agreed to be consultants. Step-by-step plans were formulated. The City provided funds and labor and engaged Mr. Kermit Freckmann, archaeologist from Presque Isle, Wisconsin, for the actual work of restoring the mounds. The project was sponsored by Town and Country Garden Club in cooperation with other area garden clubs and the City.

The tedious chore of clearing the brambles and weeds from the mounds was done by the Sheboygan Park Department in 1963 and 1964. The following year the rebuilding of the authentic shapes was accomplished by Mr. Freckmann with the Park Department's assistance. Hard work and archaeological expertise resulted in the outlining, rebuilding, numbering, and joining, by a well-defined trail, of 16 effigy mounds built over 1000 years ago. Two mounds, badly eroded, remain as humps.

The mounds have two sets of numbers. The first set (page 6) was assigned in 1927 by Milwaukee Public Museum archaeologists. When the park was dedicated and opened to the public in 1965, only the following mounds remained (page 11). At that time a second set of numbers was assigned for trail direction. See inside back cover.

MOUND DESCRIPTION – 1965

MOUND NUMBER	CLASSIFICATION	TOTAL
1, 5, 6, 10, 13, 14	Deer	6
7, 11	Panther	2
16, 17	Fawn*	2
8, 12	Linear	2
19	Oval	1
20, 21, 22	Conical	3
9, 15 (not restored)	Effigies—unclassified	<u>2</u>
		18

*Kermit Freckmann labeled them Fawn, W. C. McKern listed them
as unclassified effigies.

PARK DEDICATION—1966

“Never bloomed the earth so gayly,
Never shown the sun so brightly,
As today they shine and blossom
When you come so far to see us!”

from “Hiawatha”

Longfellow’s words express the pride and joy felt on June 23, 1966, when, in memory of the mound builders, their sacred burial ground was dedicated by the City of Sheboygan as an archaeological park for the purpose of preserving an important part of Wisconsin’s rich Indian heritage. Hundreds of people from near and far came to see the unique mounds.

Rev. Edmund Webster, rector of St. Mark’s Episcopal Church of Waupaca, Wisconsin, who gave the invocation, said, “May these mounds be a reminder to us of the ideals and concepts of the American Indian regarding the conservation and respect of God’s gift of land, water, and creatures. May their virtues be preserved by us who follow in the footsteps of these buried here.” Also speaking at the ceremony were the Mayor of Sheboygan, Joseph R. Browne; Mrs. John M. Kohler III and Mrs. Clarence J. Weber, both of Town and Country Garden Club; Mrs. Carl Ruppel of Juniper Garden Club; Mr. A. Matt Werner, editor of *The Sheboygan Press*; Raymond S. Sivesind of the State Historical Society of Wisconsin; Dr. Robert Ritzenthaler of the Milwaukee Public Museum; and Mr. Kermit Freckmann, the archaeologist who restored the mounds. Mr. Freckmann also read a letter of appreciation from the Rev. Mitchell Whiterabbit, chairman of the Ho-Chunk Tribal Council.

Sunday, June 23, 1968, was proclaimed “Sheboygan Indian Mound Park Day” by Mayor Joseph R. Browne. In honor of the occasion the City held

a program at the park, and the John Michael Kohler Arts Center exhibited the “Prehistoric Wisconsin” display which included fine artifacts from the outstanding Indian collections of M.S. Thomson and Rudolph Kuehne, both well-known local collectors.

Speaking at the program, Governor Warren P. Knowles announced that the park had been designated an historic site, and he presented the official marker to Mayor Joseph R. Browne. Also presented was the “Open Mound Exhibit,” a gift to the city from Town and Country Garden Club. It now contains replica skeletal material made of plastic, a fine restored cooking vessel, and a projectile point (arrowhead) donated by M.S. Thomson. Other speakers were Mr. A. Matt Werner, editor of *The Sheboygan Press*, who recalled the “historic battle to save the prehistoric mounds;” Dr. Robert Hruska, archaeologist, who spoke about the archaeological background of the Effigy Mound builders; and Garland Gordon, National Park Supervisor of the Effigy Mound National Monument at McGregor, Iowa, who gave the main address titled, “This Is a Park With a Future.” Mrs. John M. Kohler III, Chairman of the Indian Mound Civic Committee, presided and introduced some of the many state archaeological, governmental, and tribal representatives who had come to honor the unique mounds and the community that had saved them.

NATURE TRAIL DEVELOPED—1981

To further preserve, perpetuate, and share the unique heritage of this beautiful and sacred place, the Nature Trail, built adjacent to the mound area, was dedicated on August 22, 1981. Town and Country Garden Club provided the leadership, consultants, and materials for the construction of the trail as well as the publication of the park guidebook, “Sheboygan Indian Mound Park History and Nature Trail Guide.” Dr. Thomas Grittinger, biologist, was the trailblazer. The Sheboygan Park Department made the signs, built the trail, and helped the volunteer Seabees construct the boardwalks.

The project is in memory of the club’s cofounder, Julilly House Kohler, and her husband, John Michael Kohler III. Mrs. Kohler spearheaded the restoration and dedication of the Sheboygan Indian Mound Park.

The descriptive trail leads to the lush valley of Hartman Creek and winds through the upland area providing an opportunity to appreciate the relatively undisturbed plant communities of the northern hardwood province. Throughout the area, species of plants still thrive that could have provided for the needs of the Effigy Mound builders—those Native Americans who shared the beginning of the human story of which we are a part.

MTK-1981

Town and Country Garden Club has continued its commitment to Indian Mound Park and has kept the park as one of its ongoing civic projects, working closely with the Sheboygan Park Department on maintenance and preservation.

In 1996 the club provided new educational signage on both the Indian Mound Trail and the Nature Trail and produced a short video about the park. This revised guidebook and the video were donated to all elementary schools in Sheboygan County and are available at the Sheboygan County Museum, libraries, chambers of commerce, and other sites throughout the area.

WELCOME
TO
SHEBOYGAN INDIAN MOUND PARK
NATURE TRAIL

As you follow the trail, imagine you have come here by foot or by birchbark canoe and are seeing the dense wilderness landscape as it was 1000 years ago.

The trail is curved to avoid injury to plants. Vegetative debris is part of a windfall forest and is left undisturbed to provide habitat and maintain the integrity of the environment. The boardwalks, which are built on very soft soil, can shift and often are slippery. Please be careful. Help us to perpetuate this beautiful and sacred place.

1. Please stay on the trails to protect the vegetation.
2. Fires, camping, smoking, and pets are not allowed.
3. Please place litter in receptacle at park entrance.
4. Look—Listen—Enjoy.

Take with you your memories and photographs.

Leave only your footprints.

Thank you.

NATURE TRAIL GUIDE

As you stroll down the trail, keep in mind that many tribes have passed this land, our Mother Earth. They all have acknowledged her as their mother and the animal and plant people as their brothers and sisters. Every plant has its own particular virtue and powers. Every plant has a physical and spiritual nature and purpose.

Botanical text by Dr. Thomas Grittinger, biologist, 1981

Text relating indigenous plant material to Native American culture
by Lee Olsen, ethnobotanist, 1981

Text revised and expanded by Town and Country Garden Club, 1999

Wisconsin can be divided into two distinct floristic provinces. One of these, the prairie-forest province, is in the southern half of the state. The other, the northern hardwood province, is in the northern portion of the state. They are separated by a narrow band called the tension zone which contains some plant species of each province. This zone runs across the state from southeast to northwest and passes through western Sheboygan County, leaving Indian Mound Park within the northern hardwood province. The proximity of Lake Michigan is important in contributing to the northern climate along the shoreline and many plant species found in northern Wisconsin can be seen here which are rarely seen a few miles to the west.

MICROCLIMATES AND MICROHABITATS

When you enter the woods, differences in temperature, light, moisture, and air movement are immediately apparent. These are microclimatic differences. The global climate (macroclimate) is subject to great local variation due to differences in vegetation, topography, or soil. Thus, a range of microclimates exists within Indian Mound Park. In addition to the differences in microclimate between the open and the shaded areas, differences exist between the upland and the wetland within the park, as well as between the ground level and the upper strata of the canopy. A wide range of microclimates and microhabitats exists here and is of special concern to small organisms. A tree seedling developing in one microhabitat may not survive in one nearby with a slightly different microclimate. The existence of many of our rarest species is often due to the fact that there are only a few rare microhabitats within which they can survive.

Plant-animal relationships: The dependence of animals on plants can be seen in food chains. In these chains sunlight energy is fixed by green plants

through photosynthesis. These green plants, called producers, form the base of the food chain. Consumers then utilize this plant material. Herbivores are animals that act as primary consumers of plants and range from deer, chipmunks, squirrels, and rabbits to tiny plant-eating insects. Secondary consumers are carnivores, such as hawks, owls, foxes, toads, frogs, spiders, and carnivorous insects. At death all of these organisms, producers and consumers become food for the decomposers (bacteria and fungi) which convert them back to simple compounds and elements that are once again available for green plants. Usually food chains are quite complicated and, therefore, are more accurately called food webs.

SUCCESSION

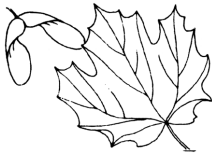
Succession involves the gradual and continuous replacement of one kind of plant by another until the community itself is replaced by another community which is usually more complex. Plants modify the environment making it unfavorable for themselves in many cases. Tall plants shade lower plants, causing changes in available light, air and soil temperatures, relative humidity, and wind force. Pioneer species make up the communities that develop early. These pioneers, in turn, are replaced by a different group of plants more suited to the modified environment. The final stage, the climax, is a community more at equilibrium with itself and will not change much unless disturbed by a climatic shift or some other influence such as fire, windthrow, or lumbering. Succession is a process that keeps repeating itself. As the plant community changes, so does the animal life.

There are two types of succession—primary and secondary. Primary succession occurs on a site not previously occupied by earlier communities, while secondary succession is the reoccupation of a site from which the former community was removed. The return of a forest after lumbering is an example of secondary succession. Since secondary succession begins on soil formed by former inhabitants, it usually runs its course much faster than does primary succession which begins on bare sand, rock or open water.

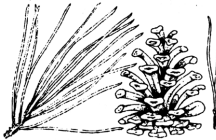
The northern hardwood forest found in the upland part of Indian Mound Park is a mixture of climax species such as sugar maple, beech, yellow birch, and other trees less tolerant of shade such as white pine, red oak, and white birch. In this area, now almost closed over, only sugar maple is abundant in the seedling stage. The red oak and white birch are represented by saplings or by trees. White pine can be found only as mature trees. Sugar maple, present in all size classes, is reproducing itself under the canopy. The white pine, red oak, and white birch were better able to grow in the past when sun conditions were more favorable.

WOODLAND

The SUGAR MAPLE, the Wisconsin state tree, is the most shade-tolerant tree and will survive in its own shade, producing many seedlings. The hard, heavy, close-grained wood has great value in cabinetmaking. The wood also has a high fuel value; it is ranked second among native woods, just after hickory in terms of BTUs per cord. The sap is the main source of maple sugar.



Native Americans call the sugar maple *Minatig* ("Our Good Tree") or *Ininatig* ("The People's Tree"). It is one of the most important of the Tree People because it gives sugar or energy. Once, it was said, pure syrup poured from the trees, but humans misused *Ininatig's* generosity and now must work hard to get little. It takes 35-60 gallons of sap to make only one gallon of syrup or about four pounds of sugar. When the sap was running during the "sugar-making-moon," the sugar was most important because food was scarce during the long winter months. Native Americans often survived on only maple sugar during March and April. Maple sugar was also used as a flavoring, even for cooked meats, as salt was not used in this area. Sugar was stored in large birchbark boxes called *mokuks*. Wood from the maple, being very hard and durable, was used for making spoons and other utensils, including the sugar paddles that were necessary for making sugar.



The RED PINE is shade-intolerant and will germinate and grow on dry, open sites. Red pine is also quite resistant to ground fires. The bark is reddish-brown and the needles are in clusters of two. Native Americans call this pine *Apakwanagimag* which refers to the bark being in flat plates or shingles. *Apakum* means "a roof." Being a member of the pitch pine group, its resinous pine knots made good torches. A pitchy healing salve was made from its resin and the inner skin.



WHITE PINE has dark, rough bark and its needles are in clusters of five. It is more tolerant of shade than the red pine. Since it will persist in a climax forest due to its great longevity, it is sometimes called a subclimax species. White pine occurs naturally over the northern part of the state and extends south to Sheboygan County. In the late 1800s when logging was at its peak, it was the most important timber tree in the state. In some areas trees over 200 feet tall and more than 500 years old were found. In

1899 Wisconsin was the leading lumber-producing state in the nation with 3.4 million board feet. However, due to logging, the virgin stands have all but vanished. The great white pine, called *Shingwak* (wag), provided for many needs of Native Americans who lived and wandered among them. The resin, bark, needles, and cones were all used medicinally, especially for treating coughs and skin sores. The inner bark was important for food and saved many lives in late winter, including those of early colonists. People mixed the pitch from the pine with burned wood and fat to make the black patchwork over the seams on their birchbark canoes and boxes.

WEST WETLAND

As you look from the upland down into the wetland, there are changes in vegetation. Humans often abuse wetlands by filling or draining. Wetlands are important as traps which prevent excessive nutrients and pollutants from reaching streams and lakes. They help retain water, reducing the threat of floods. They also help recharge underground water supplies. They provide wildlife habitat and are important to migratory birds. Wetlands, once considered too wet for study by terrestrial ecologists and too dry by limnologists, are now being thoroughly researched.

The wet, springy soil is the product of aquatic primary succession which has been taking place here for thousands of years. The first stage was characterized by open water with a sandy bottom barren of plant and animal life. Then came plankton which are very small organisms that float in the water. As rooted aquatic plants colonized the water, a marl layer formed. Marl is a white layer of calcium carbonate formed mainly by plant photosynthesis occurring in hard water. As time passed, floating and then emergent aquatic plants developed. Emergents, including sedges and horsetails, contributed great amounts of peat on top of the marl. Peat is mostly plant matter that has not completely decomposed. The peat here is almost six feet deep and has been building up since the end of the glaciation more than 10,000 years ago. Although sedges still thrive here, other species such as red-osier dogwood, speckled alder, and white birch also grow. All of these in turn will contribute to further peat buildup.

The uneven surface of the wetland, with drier hummocks and wet areas between, provides much variation in microhabitat. The differences in microclimate are considerable, with different organisms growing in different areas.



RED-OSIER DOGWOOD can reproduce asexually by forming roots from branches that touch the moist ground. Its red bark color is most evident during the winter.

Native Americans called red-osier dogwood *Meskwabimish* meaning “red shrub.” They used its inner bark for making a red dye, astringent medicines, and for adding to tobacco. Other medicinal uses include treatment of fever and flu.

WHITE BIRCH has smooth white bark that flakes and peels. The high water table limits root penetration; therefore, horizontal growth is very extensive. Much natural root grafting occurs.

Nimishomis Wigwag (“Grandfather Birch”) was the greatest provider of needs for the Native Americans. From his skin they obtained food, drink, medicine, utility, transportation, and shelter. This great “Tree-of-the-Sky” or “Child-of-the-Thunderers,” so called because lightning will not strike it, was always plentiful in northern and eastern Wisconsin. White birch likes both dry and wet land and is found in every plant community because it is a pioneer tree. No boat was lighter on the water than the birch canoe. Wigwams of birch coverings weathered the winters. Birchbark boxes called *mokuks* were sewn and embroidered with spruce roots and porcupine quills; rice, sugar, and dried berries were kept safe within because birchbark resists rotting. A birch log will rot away inside but the waterproof bark will remain firm. Even the dead were wrapped in this birch skin when they were returned to Mother Earth. Other uses included the sap for vinegar and sugar, the inner bark for tea, medicine, dye, and food seasoning, the outer bark for ink, and the wood for utensils.



SKUNK CABBAGE is one of the earliest blooming plants in Wisconsin; its purple flowers can be seen penetrating the ice. The tissues of the peculiar flowers generate heat, making it as much as 27° F warmer than the atmosphere. In the summer this plant has large rhubarb-like leaves. The odor of the bruised plant is unmistakable.

The MARSH MARIGOLD has round shiny leaves and bright yellow flowers in the early spring. The Native Americans used the leaves for a tea laxative.



Alder dominates shrub communities north of the tension zone in Wisconsin. It is common along streams and lakes. The SPECKLED ALDER has prominent lenticels—corky spots on the bark surface—which serve to aerate the stem tissues.



Wadub, the Ojibwe name for this shrub, means “bitter” which alludes to its many astringent properties. This quality is effective for stopping hemorrhages, soothing itches, healing sores, washing sore eyes, and curing an upset stomach. The bark and roots were important for dyes ranging from yellow to black.

- The dense tall herbaceous plants in a wetland include cow parsnip, tall meadow rue, and spotted Joe-Pye weed. Herbaceous plants are fleshy, non-woody and die back each year.

COW PARSNIP has huge compound leaves with three large maple-shaped leaflets that can be seen in May. It can reach a maximum height of about eight feet. This coarse plant, called *bipigwe’ wanushk*, was an important food and medicine plant. The young leaves and stems, eaten as celery, were also made into soup. It is in the same family as celery, parsnip, carrot, and parsley—but also poison hemlock.



TALL MEADOW RUE is a delicate plant with three-parted leaves, the divisions again being three-parted. A member of the buttercup family, it was not used for food but had many medicinal uses. In addition, its powdered seeds were used as a perfume for clothing.

SPOTTED JOE-PYE WEED has flat-topped clusters of deep pink flowers in summer. The whole plant was used as a diuretic, and tea made from the roots was used for colds, chills, and as a wash for rheumatism.



CREEKSIDE

- In summer, luxuriant vegetation can be seen growing along Hartman Creek. The wetland species mentioned earlier are growing here as well as the following plants.



The OSTRICH FERN grows in damp, shady places and along streams. It reproduces vegetatively by means of rhizomes—underground stem—which accounts for its spreading habit. Ferns produce two types of leaves or fronds. One is the sterile frond evident throughout the summer and the other is the fertile frond which is a smaller spore-producing structure that persists over the winter. It is one of our largest ferns. Native Americans called all ferns *Ana' ganushk*, and this strikingly handsome species was the favorite one for food. The tender young leaves and stems that break through the ground were eaten raw or cooked.

STINGING and WOOD NETTLES are often felt before being seen as they have pointed siliceous hairs containing acetylcholine and histamine under pressure. The acetylcholine causes short-term pain and the histamine longer-term itching. The stinging nettle has opposite leaves and the wood nettle has alternate leaves. Both form dense colonies by vegetative reproduction. The young stalks were used for greens and medicine. When boiled they are harmless, as they are in the fall season when dried. The dried stalks were made into cloth and string, called *Sae 'nup*, which was also used to make fishing nets.



STINGING NETTLE

The GREEN-HEADED CONEFLOWER is very conspicuous in late summer and early fall. A relative of the sunflower, this very tall plant produces bright yellow rays on the floral heads. It is found along stream banks, forest edges, shores, and in moist woods. Native Americans used it to make astringent medicines.



The VIRGINIA WATERLEAF has white to pink to deep violet flowers in early summer. It gets its name from the blotchy character of some of its leaves. Native Americans ate the leaves and made a root tea for dysentery and mouth sores.

GREEN ASH grows on wet, swampy lowlands and on riverbanks. It occurs as either a male or a female plant. This tree brother was called *Agimak* which means "snowshoe." Because of its strong, pliable, lightweight wood, it was used for making snowshoes, game sticks, tool handles, and baskets.





The WILD CUCUMBER is a fast-growing vine. Because it is an annual, it can be found growing in different moist locations each year. The plant produces small six-petaled, whitish flowers which mature into hanging, soft-spined two-inch pods.

- Animal tracks such as those of raccoon, fox, and deer are often visible in the soft, muddy banks of the creek. Numerous animal burrows are also found along the trail. This area provides food, water, and cover for wildlife. In summer, water striders, which actually walk on the water, and other aquatic life can be seen in the creek. Plants in this habitat include the weedy poisonous NIGHTSHADE and non-indigenous FORGET-ME-NOT and BURDOCK.

EAST WETLAND



The PAGODA DOGWOOD or ALTERNATE-LEAF DOGWOOD can be found along the trail. While having a leaf like that of the red-osier dogwood, this tree has alternate leaves and attains larger size. Both were used with tobacco and were very important sources of medicine.

The MOUNTAIN MAPLE is a species of the northern part of the state, being typical of moist, cool woods. The proximity of Lake Michigan and the cool air drainage into the lowlands create a favorable microclimate for this species. This small tree was used for medicines, and its three-lobed leaf pattern was a favorite bead and quill design.



The CHOKECHERRY is a common shrub or small tree. Native Americans usually dried the cherries and added them to meat or used them in baking cakes and breads. They made many astringent lotions from its inner bark and used the twigs to make a red tea and a red dye.

WHITE and YELLOW BIRCH are found growing side by side along the trail. The bark of the white birch is whiter than that of the yellow birch which is yellow to bronze-gray. Ecologically they differ greatly. The white birch often develops in clearings or at the edge of the forest as it is not shade-tolerant.



WHITE BIRCH



YELLOW BIRCH

Yellow birch is shade-tolerant, and its seeds may germinate on the moist microhabitat of rotting logs or stumps, especially if the surface is moss covered. Today yellow birch is one of the most valuable timber trees of eastern North America. Its inner bark was used by Native Americans in much the same way as the white birch. This bronze-skinned birch contains oil of wintergreen which was used to flavor tea, like sassafras of the south.

WOODLAND



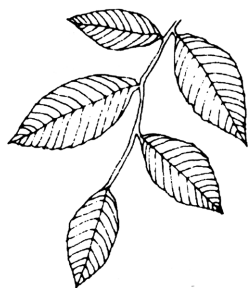
The hillside microhabitat supports extensive WITCH HAZEL. Unlike any other native Wisconsin tree or shrub, it blooms in the late fall and early winter. There may still be yellow flowers present when the snow has come. It is shade-tolerant. The seeds develop in pods and after a year of developing, the pods burst and the seeds are thrown as far as 40 feet. Its bark and leaves were used as an astringent in sweat baths, as rubbing liniments and to treat stomach ills.

The young RED OAKS of the woodland area are all about the same age and are quite crowded. However, they are self-thinning as they are competing for light, moisture and nutrients. The appearance and great size of the large red oaks suggest that the trees became established when the site was more open, long before some of their competitors germinated. Forest-grown trees are tall, straight, and lack large lower branches. The red oak is not shade-tolerant. Native Americans called the red oak *Metigomish* which refers to its acorn *metigomin*. The bitter acorns (wooden berries) must be boiled and leached before they become sweet and edible. Many tribes used the acorn nutmeats for meal and flour, both very nutritious and tasty. The nut oil was used for soothing burns. The wood is hard and strong and was used to make tools. The ashes, like those of other hardwoods,



provided lye for making alkaline solutions for soap, for strengthening plant fibers, and for making many bitter roots and nuts edible.

The woodland area supports the RED MAPLE, a tree that can grow to 60 feet tall. It is a northern species. While the red maple leaf resembles that of the sugar maple, it has fine teeth as well as larger lobes. The sugar maple leaf is only lobed, not finely toothed. The wood of the red maple, being softer than that of the sugar maple, was easily carved into tools and utensils. From its bark and leaves an astringent was made to treat sore eyes and other ailments.



In Wisconsin the AMERICAN BEECH is found only in the counties along Lake Michigan and Green Bay. It is a tree of eastern North America. The roots are shallow. Reproduction from root sprouts is far more common here than reproduction from nuts. One of these shoots may develop into a tree if a suitable opening occurs in the canopy. This species is shade-tolerant, closely approaching the sugar maple in this respect. The beech tree *Saweneh* has sweet nuts that were eaten raw, cooked, roasted, or made into a beverage.

This tree was also used for dyes and medicinal purposes. The young beech leaves were eaten as greens.

- In this woodland habitat there are many herbaceous plants including the following species.

The STARFLOWER is a small white flower that blooms in the spring. It has a tiny white seed that can remain throughout the winter.



CANADA MAYFLOWER or WILD LILY-OF-THE-VALLEY is a spring-blossoming plant with small white clustered flowers. It produces spotted red berries in the summer and fall. The Native Americans used the root as a good luck charm for games. They also made a tea which they used for headaches and sore throats.

The JACK-IN-THE-PULPIT or INDIAN TURNIP is a spring-blossoming plant which in late summer has clusters of scarlet berries. The rhizomes are edible and when dried were used as flour or as a pepper substitute.





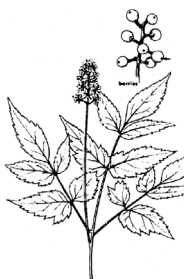
FALSE SOLOMON'S-SEAL has tiny white flowers in clusters at the end of the stem, which are followed by small berries with brown speckles, later becoming ruby red. These berries, which were called *agong'os'iminan* or "chipmunk berries," taste like molasses.

JEWEL WEED or SPOTTED TOUCH-ME-NOT has a spotted orange flower in the summer. Native Americans used the flower for dyes and the stem juice for -skin ailments such as poison ivy, nettle stings and insect bites.



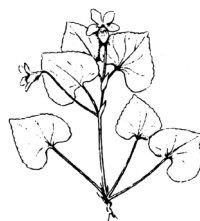
LARGE-LEAF ASTER, the main ground cover in many northern forests, is called *Megisbug* which means "eagle leaf." It was used for making many medicines and a beverage tea.

The leaves of SWEET CICELY make this flowering plant appear fern-like, hence its name *Osagatikum* which means "interlacing branches." The roots and seeds of this plant were used to provide spicy seasoning as well as medicine.



WHITE BANEBERRY is also called DOLL'S-EYES because in late summer it develops showy, china-white berries, each with a deep purplish spot. The new shoots were eaten as asparagus.

The YELLOW VIOLET (SMOOTH) has a yellow flower which appears in the spring. The flowers and leaves are high sources of vitamins C and A. The roots were stored for winter food.



CORN LILY or BLUEBEAD can be found in the ravine area. It has nodding, greenish-yellow flowers in the spring and deep blue berries in the summer. The Native Americans used the poulticed leaves for burns and bites and the plant tea as a heart medicine.

PLANTS LISTED IN THE NATURE TRAIL GUIDE

COMMON NAME	PAGE	BOTANICAL NAMES	FLOWERING AND FRUITING DATES*
AMERICAN BEECH	23	<i>Fagus grandifolia</i>	fl: April-May fr: September-October
CANADA MAYFLOWER (WILD LILY-OF-THE-VALLEY)	24	<i>Maianthemum canadense</i>	fl: June fr: August-September
CHOCKECHERRY	22	<i>Prunus virginiana</i>	fl: April-July fr: September
CORN LILY (BLUEBEAD)	25	<i>Clintonia borealis</i>	fl: May-August fr: September
COW PARSNIP	19	<i>Heracleum maximum</i>	fl: May-June
FALSE SOLOMON'S SEAL	24	<i>Smilacina racemosa</i>	fl: May-July fr: August-September
GREEN ASH	21	<i>Fraxinus pennsylvanica</i> var. <i>subintegerrima</i>	fl: April-May fr: September-October
GREEN-HEADED CONEFLOWER (TALL CONEFLOWER)	21	<i>Rudbeckia laciniata</i>	fl: July-September fr: fall
JACK-IN-THE-PULPIT (INDIAN TURNIP)	24	<i>Arisaema triphyllum</i>	fl: April-June fr: August-September
JEWEL WEED (SPOTTED TOUCHME-NOT)	24	<i>Impatiens capensis</i>	fl: August-September fr: September-October
LARGE-LEAF ASTER	24	<i>Aster macrophyllus</i>	fl: August-September fr: October
MARSH MARIGOLD (COWSLIP)	19	<i>Caltha palustris</i>	fl: April-June fr: July
MOUNTAIN MAPLE	22	<i>Acer spicatum</i>	fl: May-July fr: July-October
OSTRICH FERN	20	<i>Matteuccia struthiopteris</i>	
PAGODA DOGWOOD (ALTERNATE LEAF DOGWOOD)	22	<i>Cornus alternifolia</i>	fl: April-June fr: July-September

COMMON NAME	PAGE	BOTANICAL NAMES	FLOWERING AND FRUITING DATES*
RED MAPLE	23	<i>Acer rubrum</i>	fl: March-May fr: May-July
RED OAK	23	<i>Quercus rubra</i>	fr: biennial
RED-OSIER DOGWOOD	18	<i>Cornus sericea</i>	fl: May-June fr: August-September
RED PINE (NOR WAY PINE)	17	<i>Pinus resinosa</i>	fl: spring fr: fall
SKUNK CABBAGE	19	<i>Symplocarpus foetidus</i>	fl: February fr: May-June
SPECKLED ALDER	19	<i>Alnus rugosa</i>	fl: March-May fr: October-November
SPOTTED JOE-PYE WEED	20	<i>Eupatorium maculatum</i>	fl: July-September fr: fall to spring
STARFLOWER	24	<i>Trientalis borealis</i>	fl: May-June
STINGING NETTLE	20	<i>Urtica dioica</i>	fl: June-September fr: fall
SUGAR MAPLE	16	<i>Acer saccharum</i>	fl: April-June
SWEET CICELY	25	<i>Osmorhiza longistylis</i>	fl: May-June fr: June-August
TALL MEADOW RUE	20	<i>Thalictrum polygamum</i>	fl: May-July
VIRGINIA WATERLEAF	21	<i>Hydrophyllum virginianum</i>	fl: May-July fr: summer
WHITE BANEERRY (DOLL'S-EYES)	25	<i>Actaea pachypoda</i>	fl: May-June fr: July-October
WHITE BIRCH (PAPER BIRCH)	22	<i>Betula papyrifera</i>	fl: April-June fr: fall
WHITE PINE	17	<i>Pinus strobus</i>	fl: spring fr: fall
WILD CUCUMBER	21	<i>Echinocystis lobata</i>	fl: August fr: September-October
WITCH HAZEL	23	<i>Hamamelis virginiana</i>	fl: September-November fr: September-November
WOOD NETTLE	20	<i>Laportea canadensis</i>	fl: July-September
YELLOW BIRCH	22	<i>Betula alleghaniensis</i>	fl: May fr: fall
YELLOW VIOLET	25	<i>Viola pubescens</i>	fl: April-June

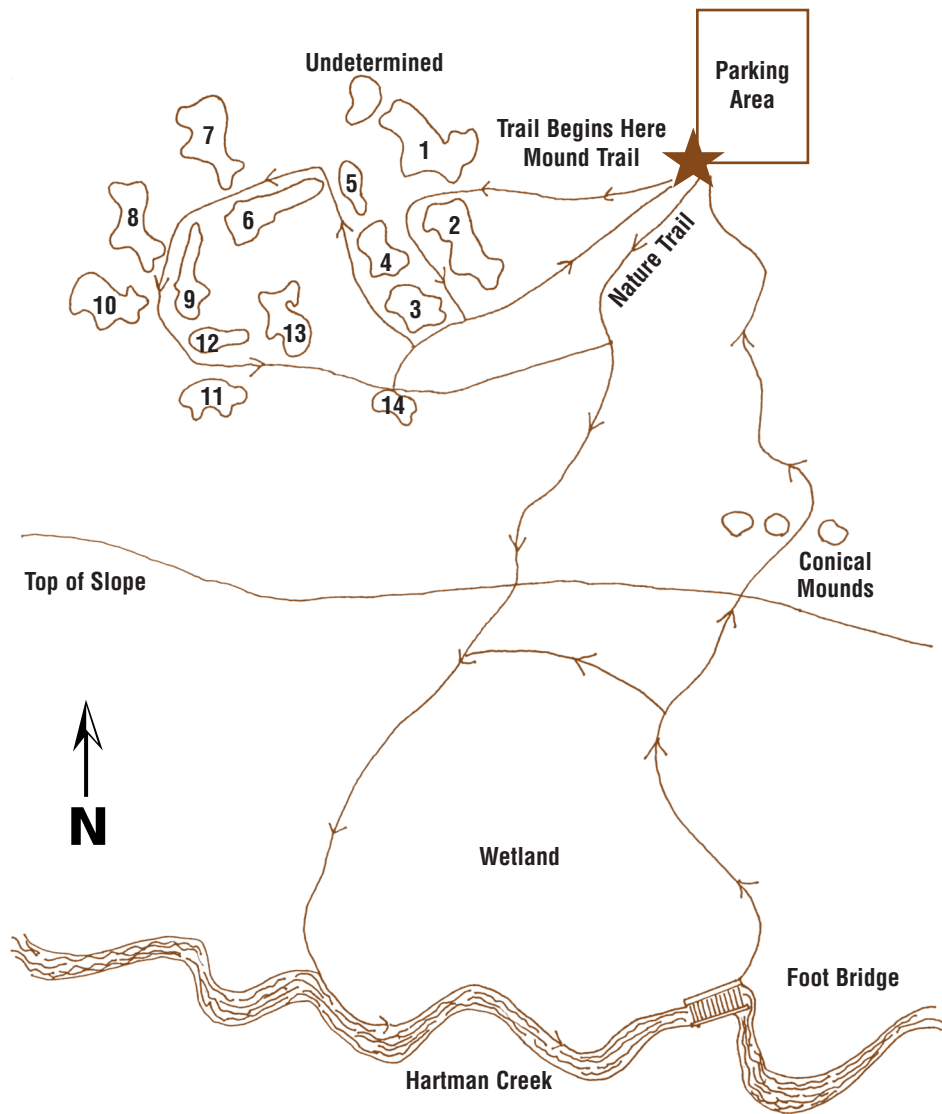
* The botanical definition of a fruit is a ripened ovary such as seeds, nuts, pine cones, and pods.

Booklet printed 1983
Revised 1999



"Spirits in the Heart", a ten-minute educational video about Sheboygan Indian Mound Park, is available at Mead Public Library located in downtown Sheboygan. The video and copies of this booklet are available at the Sheboygan Area Chamber of Commerce.

Sheboygan Indian Mound Park



Directions

The entrance to the park is located on South Ninth Street just south of Panther Avenue. From Sheboygan take South Twelfth Street to Panther Avenue which is 1 1/2 miles south of Washington Avenue.

From I-43 take EXIT 120 or EXIT 123 and follow the map.

