Your Visit

The glacial features of Mendon Ponds Park are best appreciated on foot—though a general sense of the features can be obtained by driving. Late fall, winter, and early spring are good times to look at geologic features because you can see them better with the leaves gone from the trees.

Before setting out to explore the park's glacial geology, stop by the Nature Center for a map and to look at the displays of glacial formations there. While you are in the park, please be considerate of the wildlife that live here: it is against park law to disturb the animals or to remove any plant materials from the park.

21 Parks.
Nearly **12,000** acres of green space.

YOUR Monroe County Parks.

Cheryl Dinolfo
County Executive

GLACIAL GEOLOGY of Mendon Ponds Park

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A Unique National Resource

For all its wealth of flora and fauna, and its abundance of recreation facilities, Mendon Ponds Park would be just another pleasant oasis of quiet nature were it not for its dramatic geological features.

It was to recognize the value and high quality of those features that the park was named to the National Registry of Natural Landmarks in November, 1969. In granting Registry status to the park, the National Parks Advisory Board noted the park's "significant and unique complex of glacial features." In this brochure you'll find an explanation of those features, and we hope you'll gain an appreciation of their significance.

The Glacier

It was only about 12,000 to 14,000 years ago—a blink of an eye in geologic terms—that the ice sheet that had spread its way from the poles as far south as Pennsylvania finally retreated from the Upstate New York area.

The ice sheet was part of an enormous glaciation that covered much of North America and vast areas in Europe. The period of glaciation in which this ice sheet formed has been named the Wisconsin glaciation because of the wealth of geological formations it left in that state.

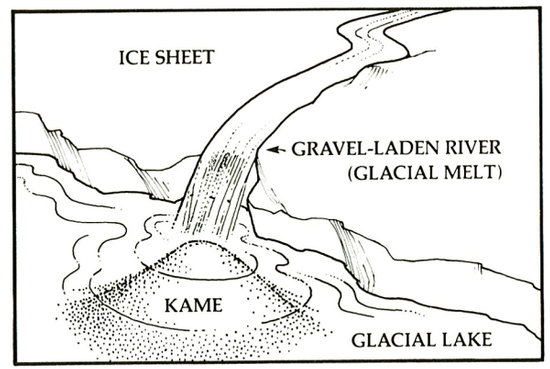
The Wisconsin ice sheet was the last of four major ice sheets to expand and retreat in the past 2-3 million years. This period of time has been referred to as the Ice Age, and though today's climate is relatively mild, it's unclear that the Ice Age is over.

The part of the Wisconsin ice sheet that lay over New York was probably between 5000 and 10,000 feet thick—high enough to cover the highest peaks in the Adirondacks. As the climate warmed, the ice sheet gradually melted and retreated northward in intermittent steps.

As the ice melted, vast lakes formed at the edge of the ice sheet. It was the transport of sand, gravel, and rocks from the melting ice sheet into the glacial lake that accounts for all the features now seen in Mendon Ponds Park. These features can be divided into three main types: *kames*, *eskers*, and *kettles*. Another prominent kind of glacially-produced feature —gently sloping hills called *drumlins* —are fairly common in western New York, but are not found in the park.

Kames

As the ice sheet melted, rivers flowed across its surface. When the rivers met the edge of the sheet, they spilled into the glacial lake, at which point all the rocky material carried by the rivers settled out in piles on the lake bottom.



Kame Formation

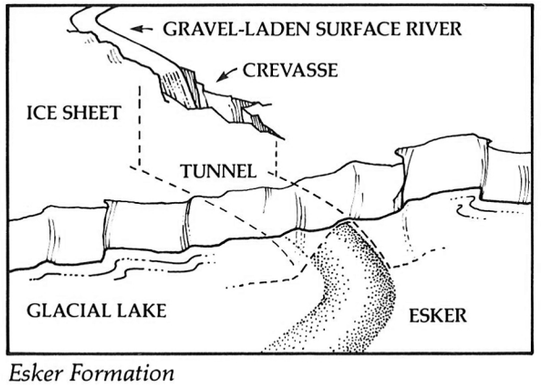
As the ice sheet moved and rivers changed course, the point at which the rivers dropped their cargos of rock moved also. Thus piles of rock were formed in irregular patterns. When the lake drained away, these mounds of rubble were left behind as the small conical hills we can see today. These hills are called kames.

Kames occur throughout the park, but the best examples of them can be found to the east of Douglas Road behind Round and Lost ponds.

Eskers

Sometimes, rivers on the ice sheet would bore a hole in the sheet and flow *under* the sheet in a winding tunnel. Rocky material carried by the streams would accumulate on the stream beds, and when the ice sheet and lake were gone, these stream beds were left behind as low, snaking ridges of rubble.

The most clearly defined esker in Mendon is on the west side of the park. It begins at Devil's Bathtub and snakes northward past Kennedy Bog. Another excellent example of an esker can be found at the easternmost part of the park behind Round Pond.

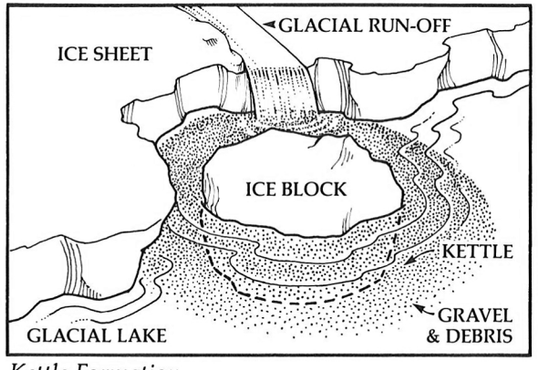


Esker Formation

Kettles

As the ice sheet retreated past the Mendon area it often broke apart at its edge, much the way glaciers today will break apart and produce icebergs. Sometimes a large block of ice would become separated from the edge and be surrounded by gravel and debris flowing off the ice sheet. Other times a block of ice would become covered with such material.

In either case, when the ice and waters abated, the ice blocks would melt, leaving behind roughly circular depressions called kettles. There are many kettles in Mendon, some dry, some filled with water. Devil's Bathtub is the most prominent and well-known of the park's kettles. Round Pond and Lost Pond are also water-filled kettles.



Kettle Formation

Topographical Map of Mendon Ponds

Adaptation of U.S. Geological Survey Map

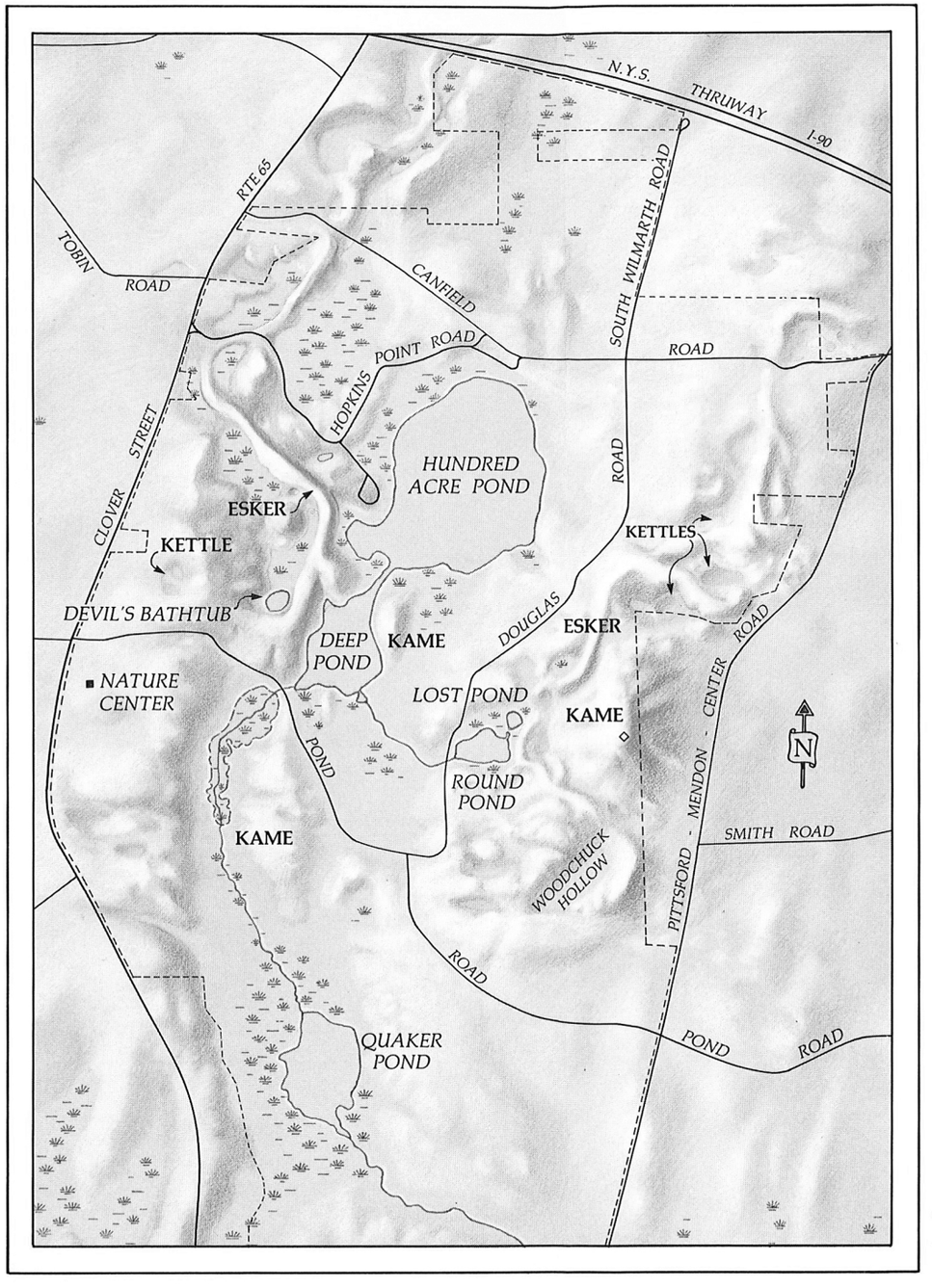
½ 1 Mile

1 Kilometer

Park Boundary

Wetlands

◇ Highest point in Park: 820 Ft. Altitude



Topographical Map of Mendon Ponds