

Code:	GC54D52	Site Name:	From Kettle to Peat Bog
Coordinates:	Parking: 245 th Ave; N45 12.224 W091 14.953 Parking: Cty CC; N45 11.280 W091 10.375 Parking: Off 250 th Ave; N45 12.279 W091 12.901 Boardwalk: N45 11.889 W091 12.804		
Feature Type:	Peat Bog		
Area Description:	Firth Lake (IAT map #16) is on State Ice Age Trail Area property managed by the Department of Natural Resources. It is a shallow kettle partly filled with peat.		
Equipment:	GPS, Compass, Tape Measure		
Educational Information:	<p>A <u>kettle</u> is a depression in the land and is formed when a block of ice breaks away from a receding glacier.</p> <p>1) The ice then gets buried by glacial outwash.</p> <p>2) When the ice blocks eventually melt, kettle holes are left behind.</p> <p>In most cases, kettle holes eventually fill with water, sediment, or vegetation.</p> <p>Most kettle holes are less than a mile in diameter, although some in the Midwest exceed 6 miles. Most are also less than 30 feet deep.</p> <p>A <u>peat bog</u> is an area of wet spongy ground of decomposing vegetation. It has poorer drainage than a swamp. It is formed where water on the surface is acidic and low in nutrients. Flooded hollows and basins provide ideal growing conditions for reeds and sedges. When the vegetation dies, the water in the hollows prevents oxygen from reaching the dead plants. Organisms that decompose plants can't survive without oxygen so the plants do not completely rot away. Partly rotted plants gradually build up to form peat.</p> <p>The gradual accumulation of plant material in a bog functions as a carbon sink. The distinctive group of plant and animal species are very important for biodiversity. A typical peat bog contains about 95% water and 5% organic matter.</p> <p>According to the authors of <u>Geology of the Ice Age National Scenic Trail</u>, "Peat will eventually take over the rest of the open water and all of Firth Lake will become a peat bog with a small stream flowing through it."</p>		
Resources:	Geology of the Ice Age National Scenic Trail; by David M. Mickelson, Louis J. Mahler Jr., and Susan L. Simpson Wikipedia		
Logging Requirements:	<ol style="list-style-type: none"> 1. Describe the differences you see on either side and end of the boardwalk 2. Compose an alliteration using the words peat and Pete that also describes in which direction you think the bog is moving. 3. Estimate the area (in square feet) of the peat bog in it's current state. Make a prediction of the peat bog area in the future (eg: 10, 20, . . . 50 years from now). Show the formula you used. 		