

Code:	GC54D79	Site Name:	Chippewa Trifecta
Coordinates:	Parking at Townline Road: N45 13.203 W091 21.416 Bench: N45 13.206 W091 21.208 Sign: N45 13.222 W091 21.167 Channel: N45 13.156 W091 21.082		
Feature Type:	Ice Walled Lake Plain; Kettle Pond; Meltwater Channel		
Area Description:	The Chippewa Moraine area has impressive high-relief hummocky topography with moraine that is more than 5 miles wide. This section of the Ice Age Trail also has several other glacial features.		
Equipment:	GPS		
Educational Information:	As you walk along the trail from Townline Road, you will come to:		
	<ol style="list-style-type: none"> <li>1. a bench overlooking a kettle pond, (Dumke Lake);</li> <li>2. a sign identifying the area as an ice-walled lake plain; and</li> <li>3. a dry melt-water channel.</li> </ol>		
	<p>A <b>kettle</b> is a depression in the land and is formed when a block of ice breaks away from a receding glacier. The ice then gets buried by glacial outwash. When the ice blocks eventually melt, kettle holes are left behind.</p>		
	<p>An <b>ice-walled lake plain</b> forms when the glacier acts as a container to hold water dammed in a complex of debris-covered ice. The lake sediment accumulates with fine-grained sediment carried to the more central, deeper parts of the lake. Course sediment of sand and gravel accumulated around the edge of the lake as it slides off the surrounding ice. The lake sediment stands as a relatively flat-topped hill that is higher than the surrounding area when the ice walls containing the lake have completely melted away.</p>		
	<p>Many ice-walled lake plains have a dish-shaped surface with the course material deposited near the ice wall forming a rim ridge around the lake plain. They are commonly roughly circular areas of a mile or more across.</p>		
	<p>A <b>tunnel channel</b> is formed when a subglacial river cuts into the underlying glacial bed. Eventually, water under high pressure exited and cut a gorge or tunnel channel. In Wisconsin, such channels occur along the outermost edge of the late Wisconsin advance. The water flows that cut tunnel channels were apparently sudden, short-lived, and huge. They carry a large flow of glacial melt-water from beneath the ice creating broad troughs.</p>		
Resources:	Geology of the Ice Age National Scenic Trail; by David M. Mickelson, Louis J. Mahler Jr., and Susan L. Simpson		
Logging Requirements:	<p>Observe the locations of the three features discussed in relation to each other.</p> <ol style="list-style-type: none"> <li>1. In what order do you think the kettle, ice-walled lake plain, and tunnel channel were formed? Why?</li> <li>2. Would an ice-walled lake plain be better or worse for farming than the surrounding area? Why?</li> </ol>		