

What are some of the geological features an EarthCache could represent?

- Barrens: Areas where pine and stunted oaks grow . . . barrens are found in prairie-like areas with sandy, infertile soil.
- Bluff: A very steep hill . . . or small cliff, frequently next to a river or ocean.
- Bog: A wetland . . . that accumulates acidic peat, a deposit of dead plant material.
- Dalls / Dalles: A gorge . . . formed by torrents of meltwater released by the melting glacier or draining glacial lakes. Some dramatic examples; the Dells of Eau Claire, the Wisconsin Dells, and The Dalles of the St. Croix.
- Dolomite: A rock . . . similar to limestone consisting largely of calcium magnesium carbonate.
- Drumlin: An elongated hill . . . formed from the debris carried by the glacier and deposited as the glacier moved along. These streamlined elongated hills show the direction the ice was moving.
- Erratic: A boulder . . . that was carried long distances by the glaciers, then deposited where the glacier melted.
- Esker: A sinuous ridge . . . formed of rounded sand and gravel deposited by the streams that flowed through tunnels at the base of the glacier as it melted.
- Extinct Glacial Lake: A glacial lake that drained . . . often catastrophically when a glacier or glacial lobe melted back.
- Fen: Low, flat marshy land . . . where decomposing plants accumulate, forming peat.
- Ford: A shallow place . . . in a river or stream where one can cross by wading.
- Glen: A valley . . . typically one that is long, deep, and often glacially U-shaped, or one with a water course running through.
- Great Lake: Freshwater lake . . . that is part of the chain that form the largest group of freshwater on Earth.
- Hummocky: Hilly . . . knob and kettle topography.
- Ice-Core Moraine: A moraine . . . that was formed by the slow disintegration of large masses of ice that broke off the main glacier and were buried by sand and rock still being pushed south by the glacier.
- Ice-Walled-Lake Plains: Flat top mounds . . . that were once the bottoms of lakes that lay in pits in the ice sheet. When ice melted, the accumulated debris formed the mounds.
- Kame: A conical hill . . . composed primarily of water-rounded sand and cobbles. These deposits were formed by streams that swirled downward through cracks in the ice.

- Kettle / Kettle Lake: A surface depression . . . formed by the melting of large blocks of glacial ice that were buried in glacial till. As the ice melted, the moraine material collapsed into the hole forming funnel shaped hollows. Kettles are 20 feet or more deep.
- Marsh: A wetland . . . which is subject to frequent or continuous inundation (flooding).
- Meltwater Channel: A channel . . . formed by abrasion as a result of sediment from a melting glacier; can be under, along, or in front of an ice margin.
- Moraine: A ridge . . . formed by the gravel, sand, and boulders carried along near the edge of the glacier and deposited as the glacier melted back. Some are only 20-30 feet high, while others in the Kettle Moraine area rise 250-300 feet.
- Mylonite: A type of rock . . . formed 2 billion years ago by lava flowing to the earth's crust. Over time, the rock tilted to present near vertical position seen at the Dells of Eau Claire.
- Niagara Escarpment: A ridge . . . which is a transition zone between different physiogeographic provinces that involves a sharp, steep [elevation](#) differential, characterized by a [cliff](#) or steep slope.
- Outwash Plain: A sandy plain . . . formed when glacial meltwater streams became braided (interconnected) and spread smaller particle material such as sand, over a wide area. They were deposited in both glaciated and unglaciated areas.
- Pitted Outwash: An area of outwash dimpled with kettles . . . formed by meltwater-carried blocks of ice that were deposited with sand and gravel, and later melted in place, leaving kettles.
- Pothole: A deep, cylindrical hole . . . formed when water from the melting glacier swirled vortices that rotated and vibrated "grinding stones" into rock. The grinding stone often ends up as a smooth ball shaped rock left at the bottom.
- Sedge Meadow: A wetland . . . that is dry in late summer and composed mostly of sedges; plants that look like grasses but feel rough when stroked.
- Spring: A natural water system . . . that delivers water to the surface of the Earth.
- Swale: A hollow or depression . . . at the beginning of a valley that often has wet soils.
- Tunnel channel: A valley . . . carved by a fast moving river under a glacier. After the glacier has melted, the valley often contains a series of lakes.