

# Landform Field Sketching



*"A good cartographer should not only grasp landscape, in a map-drawing sense, but also through sketching from nature."* Eduard Imhof, 1982.



Sketch of landforms at Dry Falls, Washington.

This poster presents the basic idea that sketching in nature provides to the cartographer an introduction to the genesis and morphology of landforms, improves observation and graphic judgment, and develops the cartographers' artistic sense for mapmaking.

Drawing demands careful observation. Observation is a conscious viewing directed toward certain objects. *"It takes a considerable difference if one views something with a sketching pen in hand than without the pen in hand."* Paul Valery

Sketching forces the cartographer to think objectively and abstractly, and develops the skill needed to transform complex natural phenomena into simple lines and strokes. It develops judgment and encourages a taste for graphic understanding.

A serious sketcher often feels discontent with his or her result when faced with nature. Sketching can be an endless wrestling between form and expression. Despite, and perhaps because of this conflict, landscape sketching can bring great satisfaction. It provides and increases the interest in the activity of drawing maps.

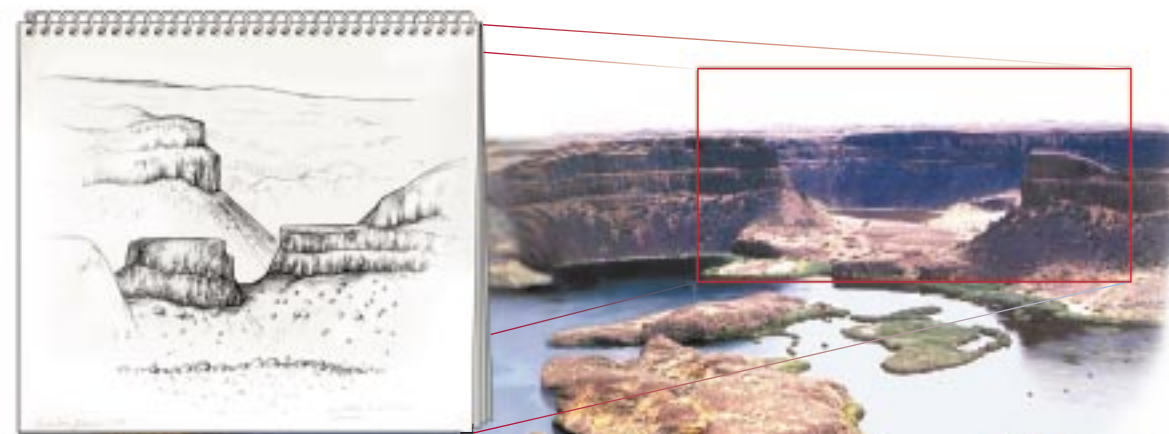


Sketch of plucked basalt in the Channeled Scablands, Washington.

## Creating Purposeful Splendor

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Every cartographer should reach for a drawing pen during his/her travels. At first the beginner should try line sketches, and not tonal representations. A "scientific" sketch is easily over complicated by incidental tone values, shading, etc. Keep in mind that one purpose of a scientific sketch is to communicate information. This purpose can aid the cartographer in reducing the overwhelming "splendor" of nature to an approachable beginning when he or she begins to sketch. Start simply and work toward the complex.



GNSI members, Guida Casella and Kathleen Zuchniak sketching and taking photographs of the unique basalt landforms at Dry Falls Interpretive Center, Grand Coulee, during a landform field sketching trip. The trip was part of the 1999 GNSI Annual Conference in Richland, Washington.

## Observing and sketching landforms is an excellent introduction to their genesis and morphology.

Line drawings from sketches of glaciated landforms in Wisconsin. Created for 4th grade Wisconsin social studies text.



Drumlins have shapes like overturned canoes. They can vary in size from 50 to 100 feet in height and over a mile in length!



Terminal moraines are found at the end and along the edges of glaciers. The glacier forms the moraine by pushing and dumping piles of many kinds of dirt and rocks. These moraines look like a wall of hills or a ridge. When you see a moraine, you are seeing how far the most recent glacier came into Wisconsin.



Eskers are long winding narrow hills. They are formed by meltwater streams with glaciers. Over time, deposits in the streams build up. They become long snake-like hills that follow the shape of the stream.



Kettles are formed when a big chunk of ice separates from the main glacier. This chunk is surrounded by rocks and dirt that the glacier leaves behind. When the chunk of ice melts, it leaves a deep hole. Today kettles are usually filled with water and look like a lake or a pond.



Homogeneous rock with gullies



Sedimentary rock, horizontally bedded.



Primary rocks, steeply dipping strata, rocky spires



Gneiss, pyramidal slopes

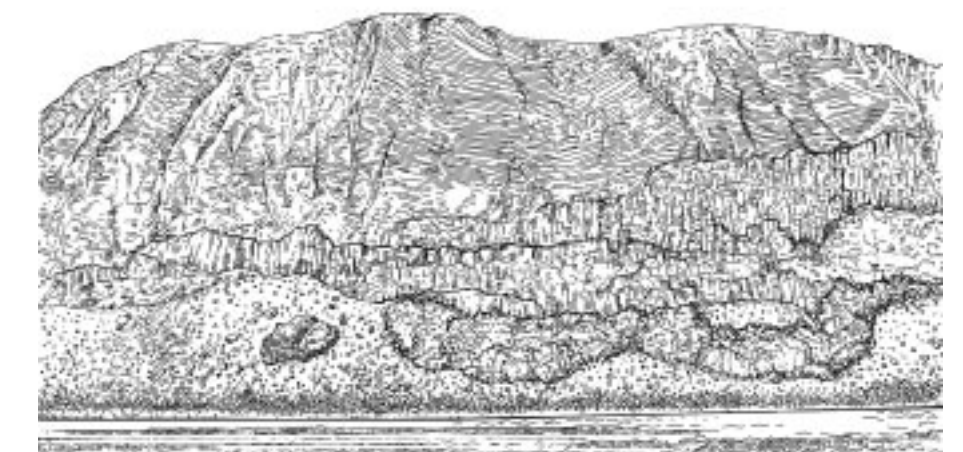
Studies based on the field sketches of Eduard Imhof, from "Cartographic Relief Presentation", published by Walter de Gruyter, Berlin, 1982.

## Sketching Compared to Photographs

Line drawings and landscape sketches express a natural impression that can be quite different from a photograph. A sketch is not just a copy, but a personal interpretation. Compare sketches with corresponding photos of the same landscape and landforms. This kind of comparison allows us to recognize the specific characteristics of each of the two types of images.



An example of folded/faulted basalt along the Grand Coulee and Banks Lake, central Washington, US.



Line drawing developed for sketches and photographs of the same view.