Geology

eology is the study of rocks, but is also concerned with the soils that develop over the rocks, natural resources such as water, and the landscape that results from the interplay of all. In New Hampshire, most of our landscape of rolling hills can be interpreted in the context of the big event that ended about 14,000 years ago – the last glaciation. Massive glaciers from the north pushed loose rocks and soils southward into the ocean.

As the glaciers retreated during a warming cycle, piles of sediments were left among ice blocks. Rains and melting waters found drainage paths through the new landscape, forming rivers, such as the Lamprey River. The natural wearing away of the glacial debris often formed deposits of fine silts and clays, sands, and gravel.

People can have large impacts on the landscape too – the steep slope at the edge of the trail was created after people mined sand and gravel. Do you see any evidence of how people might have impacted the trail you are currently standing on? Are there any steep slopes that might be a result of erosion?

Some areas still have glacial till – unsorted materials left behind by the glaciers. The glaciers also left behind giant rocks, called glacial erratics, like the one in this photo from Madison, New Hampshire. Can you find any erratics or larger rocks left behind on this trail?



giant boulders--left on the landscape from glacial retreat. This one is found in Madison, NH. Credit: NH Department of Environmental Services

Erratics--or



An example of roots showing because of erosion along a steep slope. Credit: Abigail Gronberg



Another example of erosion along the sleep slope of the trail. Credit: Abigail Gronberg