

Background information:

Providence Canyon is formed from sediments deposited over 50 million years ago when the area was under ancient seas and near coastal beaches. These sediments consist of different colors of sands and clays that are susceptible to groundwater runoff.

In the late 1800s people cleared the land of trees to farm the area. They took no measures to avoid soil erosion, so the small gullies from heavy rains continued to form and get deeper. By the 1850s these trenches were up to three feet deep causing a path for the water to continue to erode the soils during each heavy rain.

A classroom activity to simulate this progression of erosion will help students understand what happened.

How is this different from the formation of the Grand Canyon that was formed by a river? How are the destructive process of erosion and the resulting constructive process of deposition similar?

Sanders, Sigrid. "Providence Canyon." New Georgia Encyclopedia. 10 March 2015. Web. 10 July 2017

For additional reading and for ways to put the science into context with what was going on historically in Georgia, visit the New Georgia Encyclopedia for additional information, <https://www.georgiaencyclopedia.org/articles/geography-environment/soil-erosion> .

The Georgia Soil and Water Conservation also has relevant information, <https://gaswcc.georgia.gov/> .

A copy of the Geologic Guide to Providence Canyon State Park, by Lisa G. Joyce can be found here: https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/GG9a.pdf .