11. Protected by Ancient Landslides!

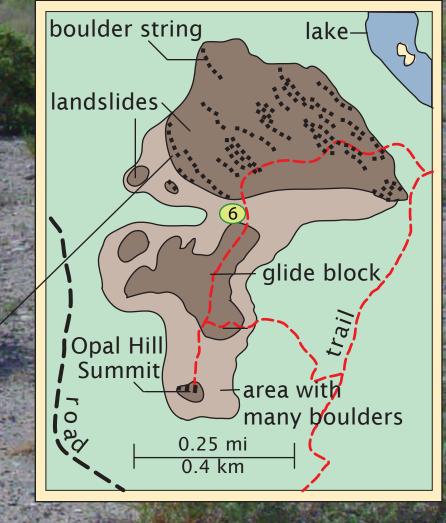
If you have hiked up Opal Hill, you have seen the armor-like fields of hard sandstone and conglomerate boulders that protect the hill from erosion. Where did all the boulders come from?

As with most science, finding an answer leads to more questions: Why did landslides preserve only this area? When did these slides happen? Where did all the eroded rock go? AAAAh. Think about how time and change go hand in hand.

This large piece that slid as one

is called a glide block.

Each string of boulders on the slope of Opal Hill represents a separate small slide that broke off from the Dakota Formation's sandstone cliffs



Because of the sloping bedding, the cliffs became higher after each new wedge of rock broke free. This led to a larger slide.

The creeks found their way around the landslides, leaving the slides where they were and cutting down through surrounding softer rock.



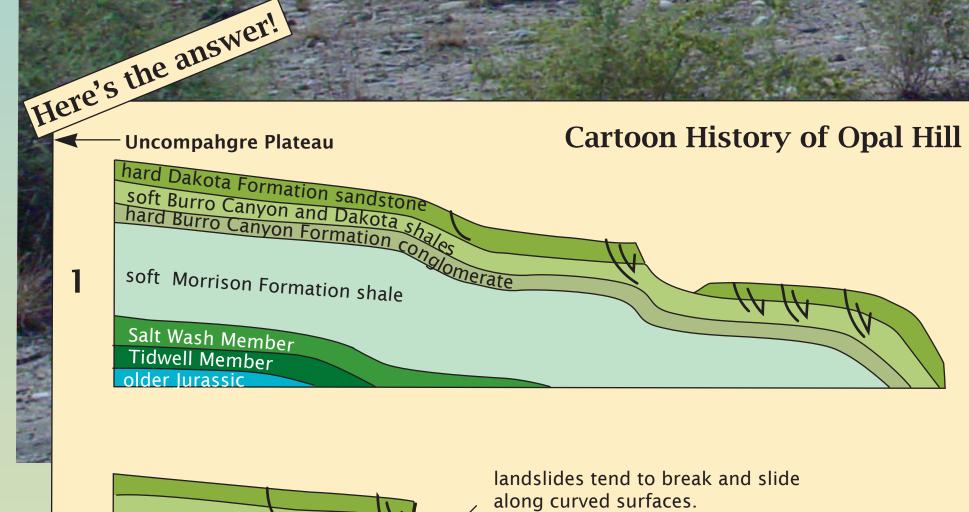












Younger rocks once covered this area, and draped in folds off the side of the Uncompanyare Plateau. The soft Mancos Shale weathered off quickly, leaving a sloping surface of Dakota Formation sandstone.

Cliffs formed where rock slid off the folds. The sides of the cliffs slid off, bringing with them long blocks of hard sandstone. Notice how the sandstone blocks end up with their bedding sloping uphill.

