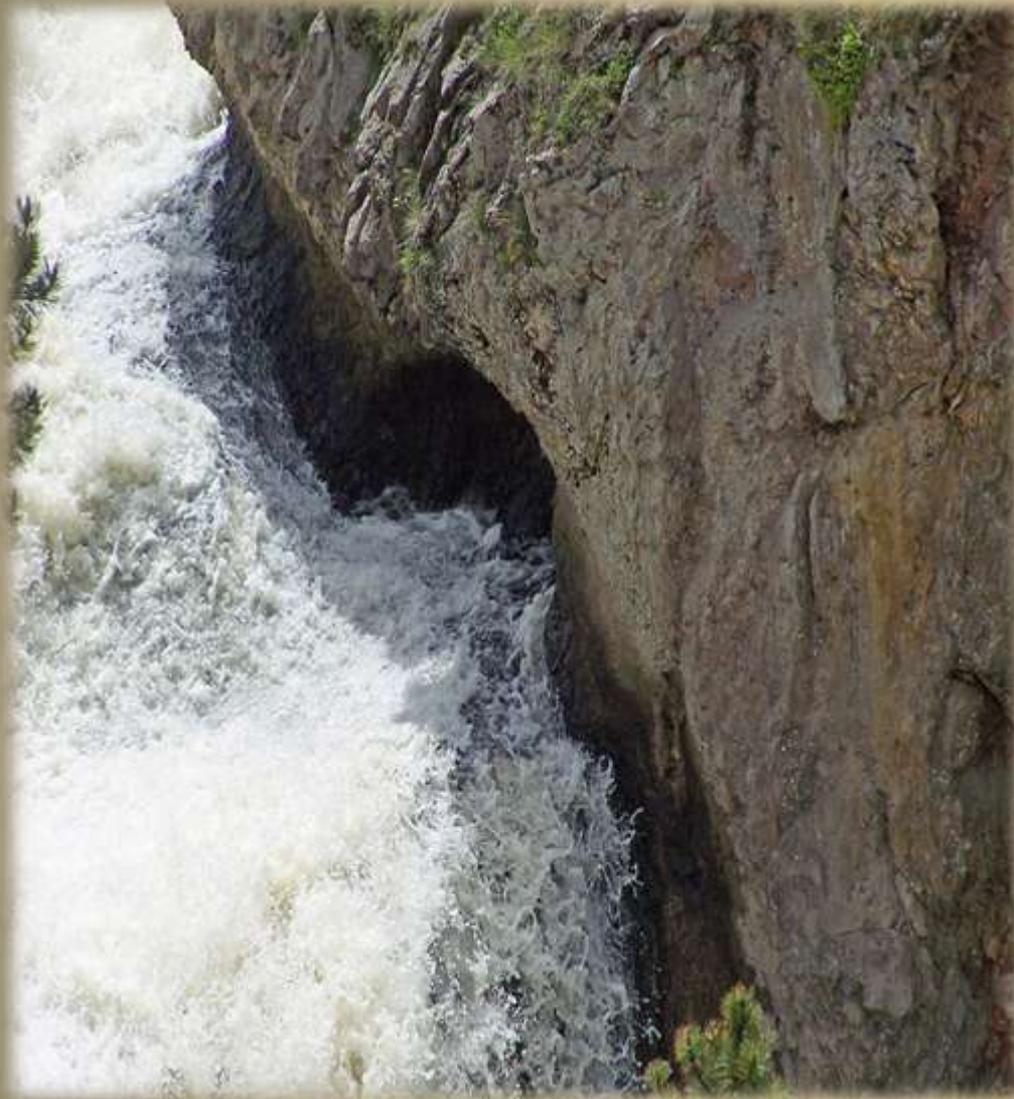


Weathering & Erosion: Destructive Forces at Work



***Yellowstone National Park
2011 and 2012***



Water cuts underneath the rock to form a ledge. As it breaks down, the sediments are carried away by the river.

Water is a powerful agent in the weathering and erosion process.



Here, the Yellowstone River carved out the soil underneath this rocky area to form another ledge.



Hundreds of thousands of years of weathering and erosion on the shoreline of Yellowstone Lake have destroyed layers of rock leaving a rocky overhang.

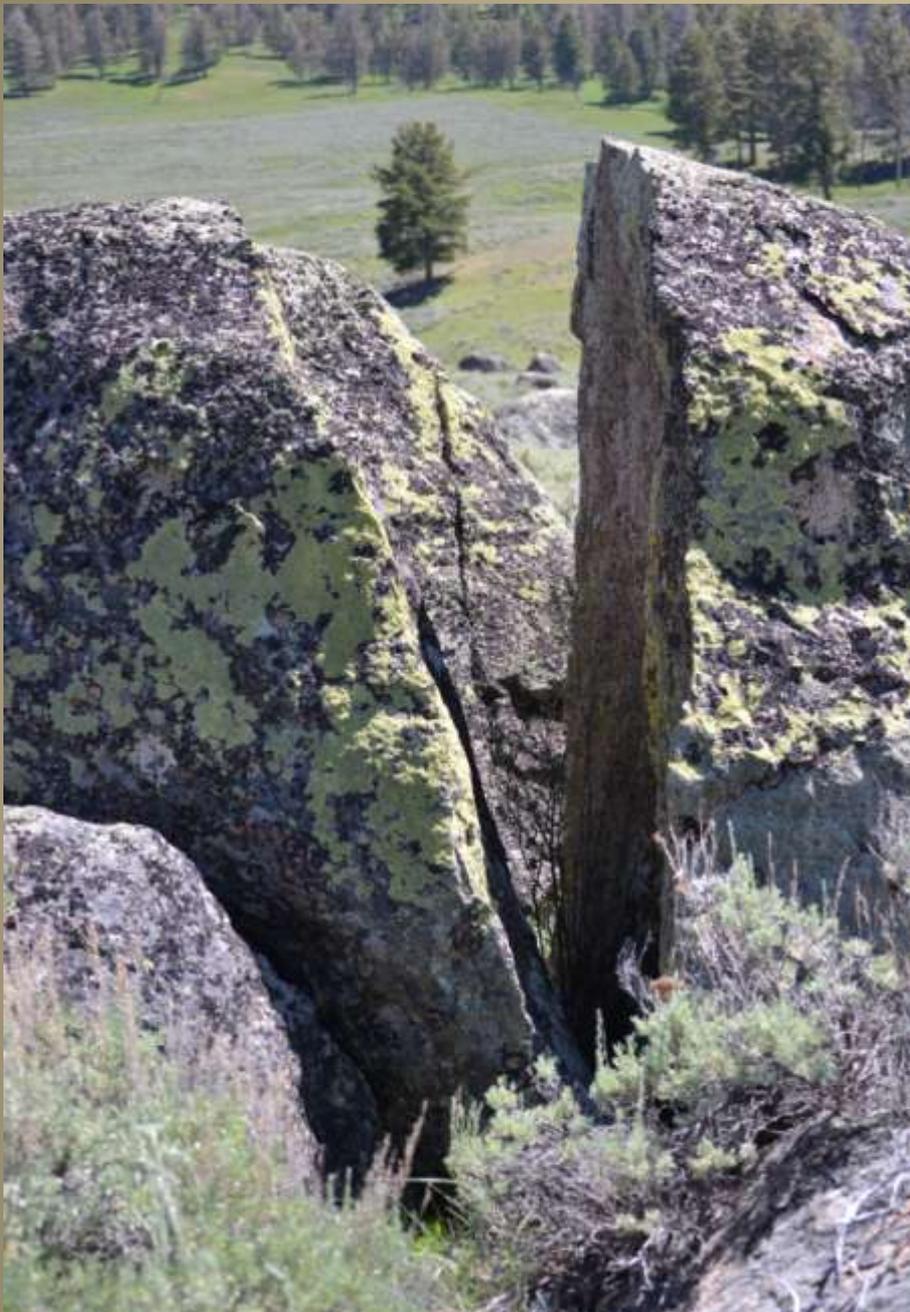


Water was the first agent to act on this rock. Over thousands of years, wind has replaced the water in the weathering process of this rock. Look how it balances on a small point.



Take a closer look...





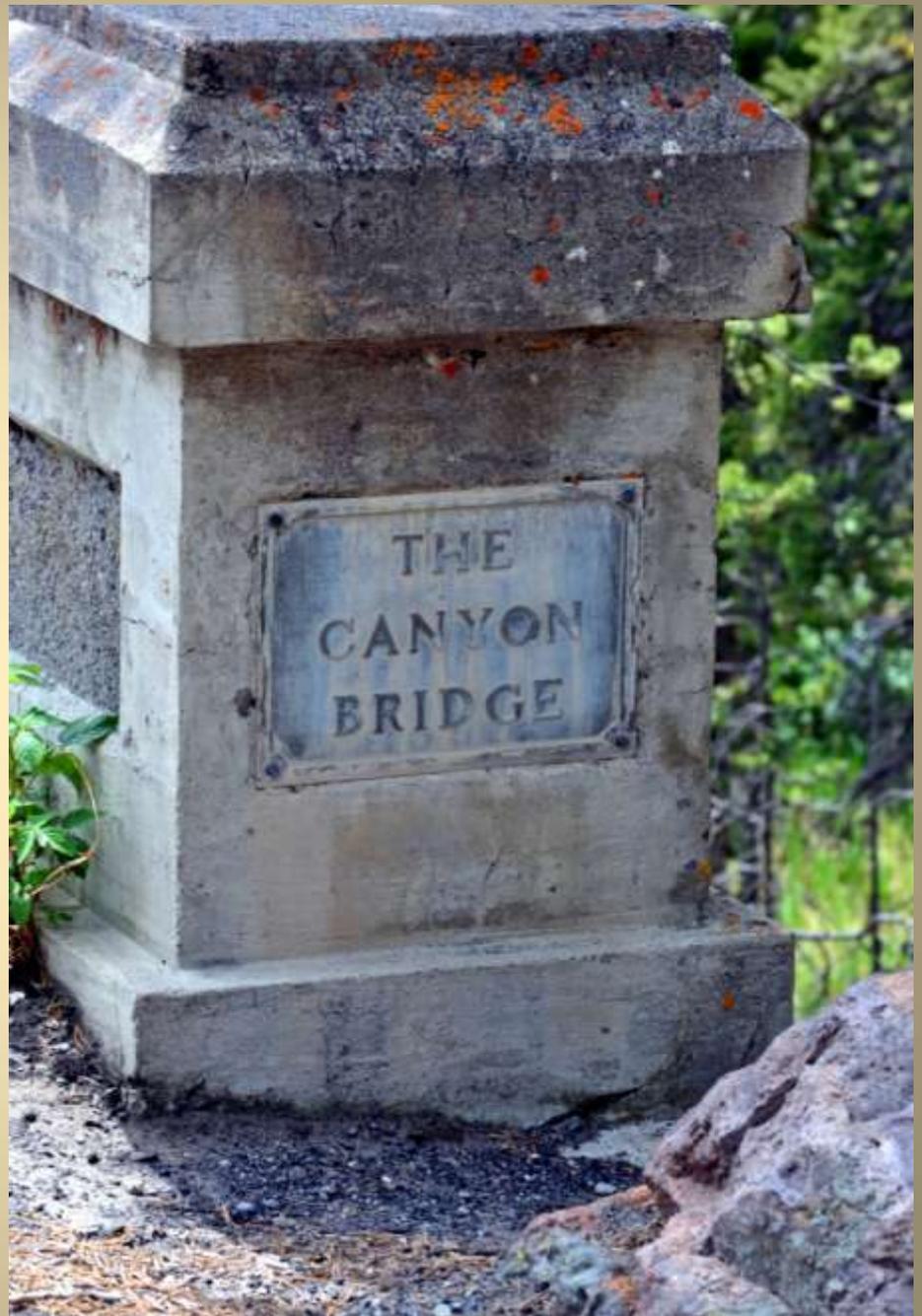
Water seeps into tiny cracks in rocks and freezes.

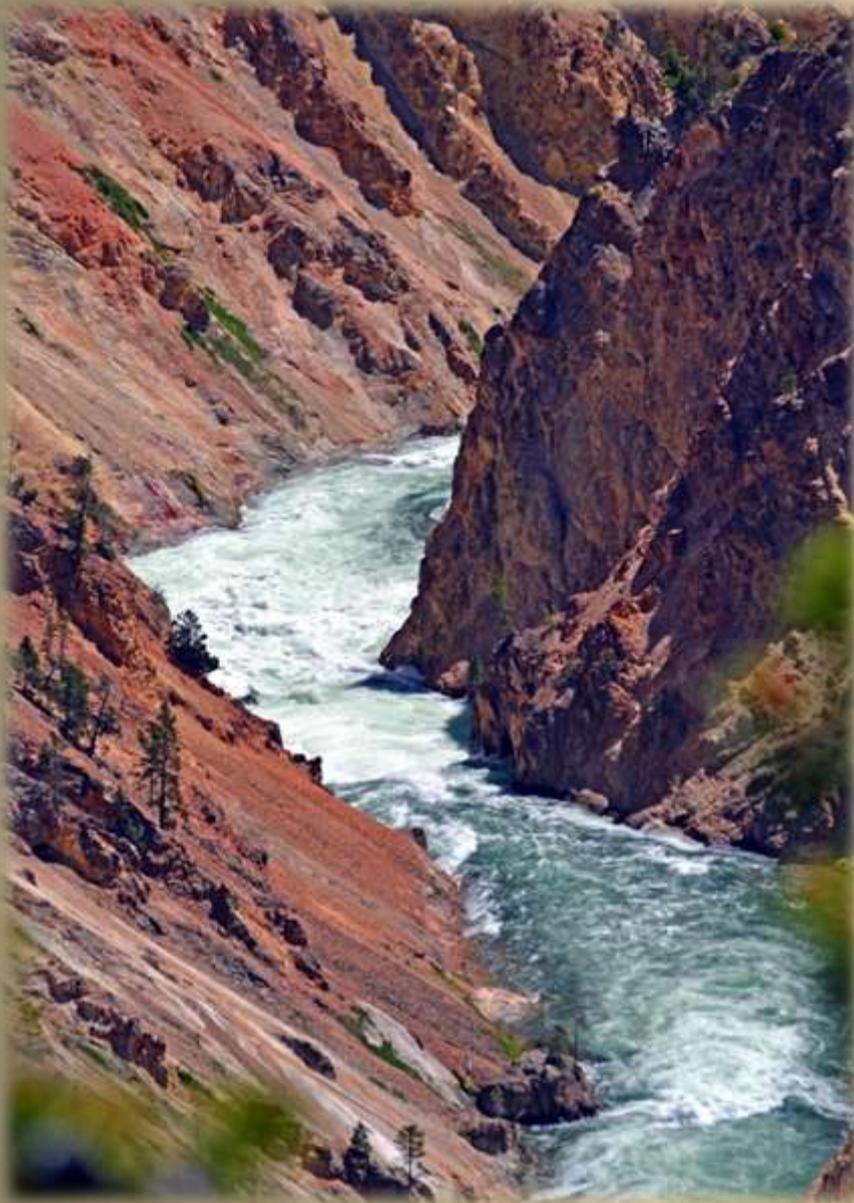
As the water expands the cracks grow larger.

MUCH LARGER...



Over the timespan of around 100 years, this bridge has been weathered by wind, water, and ice. What was once a new structure is now only a weathered reminder of the past.





The Grand Canyon of the Yellowstone was carved out by the eroding way of soft volcanic rock. It continues being eroded away by the Yellowstone River.

**The upper and lower falls plunge water
308 feet into the canyon washing rocks and sediments
down stream.**



At the Lower Falls, you can also see evidence of microbes eating the rock.

The green color you see in the water is actually a microorganism.



The Grand Canyon of the Yellowstone

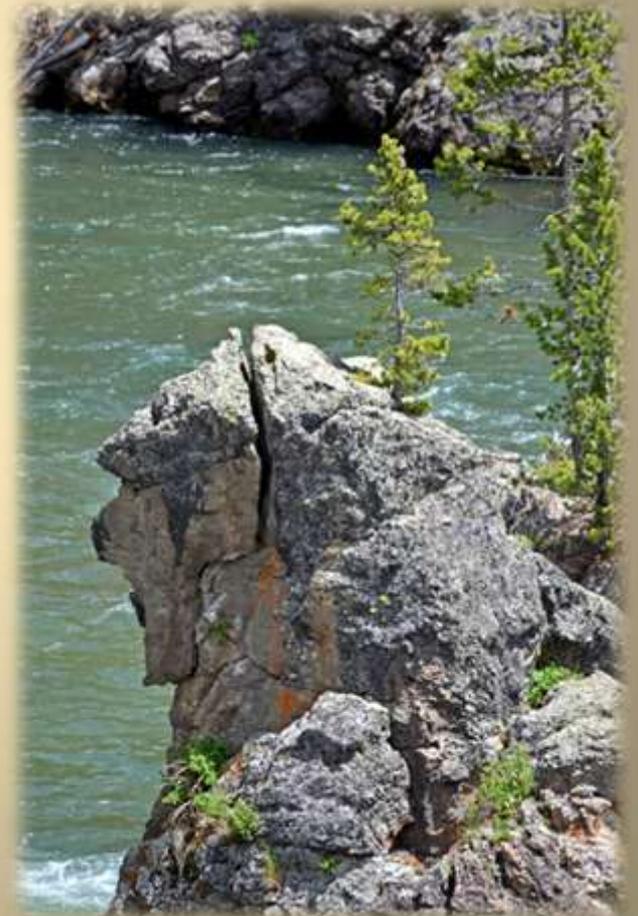
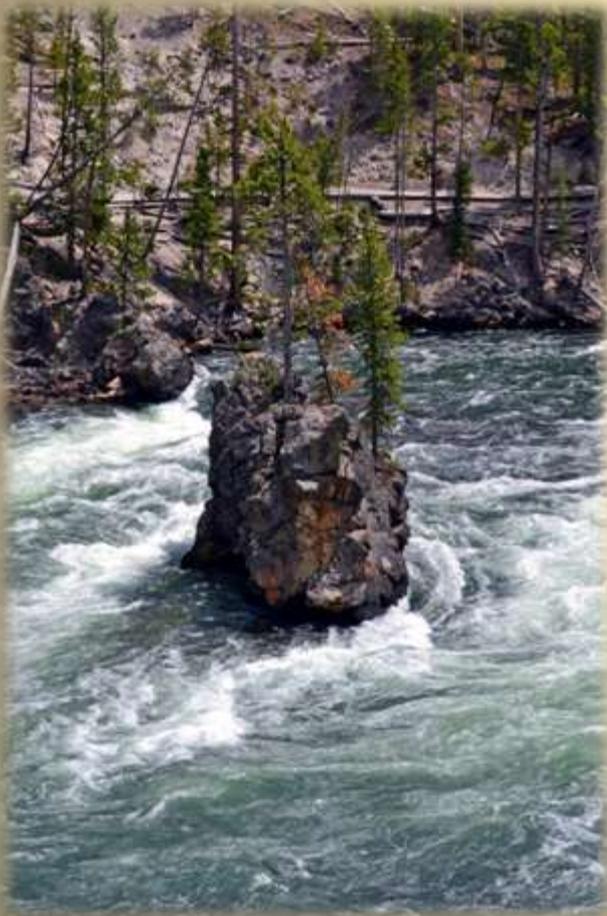




At one time, these rocks were one giant rock. Over time, water has weathered them and the river has carried the pieces away. Trees growing in the rock also cause it to weather.



Water cuts around the rock. It also freezes in the cracks which splits the rock into.



Here, a wolf climbs the weathered, eroded, and rocky shoreline of the Lamar River.



What do you remember?

- 1. What are the three agents of weathering?**
- 2. What happens to sediments that are worn away from rock?**
- 3. How does ice effect rock? Describe what happens.**
- 4. Explain how weathering and erosion are considered destructive forces.**