

# How did it happen?

Learn a few hand signs to help you better understand what happened during this amazing event:



1. The winter and spring of 1925 were very wet with rain and melting snow. Water soaked into the sandstone and shale. **(Make motion with fingers like rain coming down)**
2. On the night of June 22, 1925 an earthquake shook the area, which may have helped cause the landslide. **(Move hands side to side like an earthquake)**
3. Because the rocks were saturated with water, they became weak. The shale layer failed and a giant landslide swept down the mountain. **(Sweep your hand diagonally like the rock coming down the mountain)**
4. The landslide blocked the Gros Ventre River below, damming it and creating a lake on the upstream side. **(Punch your hand like the river blocked by the dam)**
5. Two years later, on May 18, 1927, the dam broke and flooded the nearby town of Kelly, taking the lives of six people. **(Move hand like a raging river)**

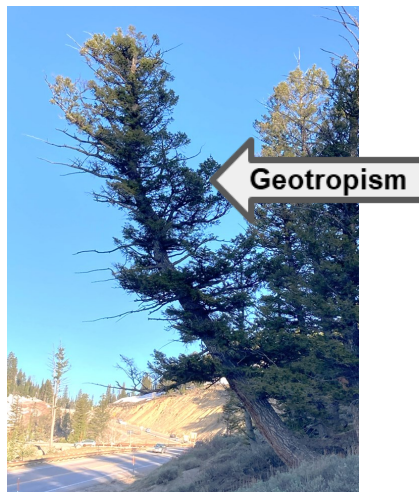
*A rush and a roar came [from] the entire side of the mountain.*

*Guil Huff, describing the landslide*

## Trees on the Move

We don't often see trees on the move, but picture a tree surfing down the landslide. Incredibly, some trees moved with the rocks during the landslide and survived in their new location! The trees were knocked over but adjusted to the new position and began growing upwards again. Growing upwards in a different direction resulted in a curved tree trunk. This is a phenomenon known as **geotropism**.

An example of geotropism. The tree trunk was tilted by moving earth below it. Overtime, the tree trunk curved to grow upwards again.



## Recognition

This brochure is brought to you by the 4<sup>th</sup> and 5<sup>th</sup> graders at Kelly Elementary. We hope you enjoy learning about the geology in our backyard!



For more information, please reach out to the  
Bridger-Teton National Forest  
Jackson Ranger District  
340 N Cache St, Jackson, WY 83001  
307-739-5400



Forest Service  
U.S. DEPARTMENT OF AGRICULTURE



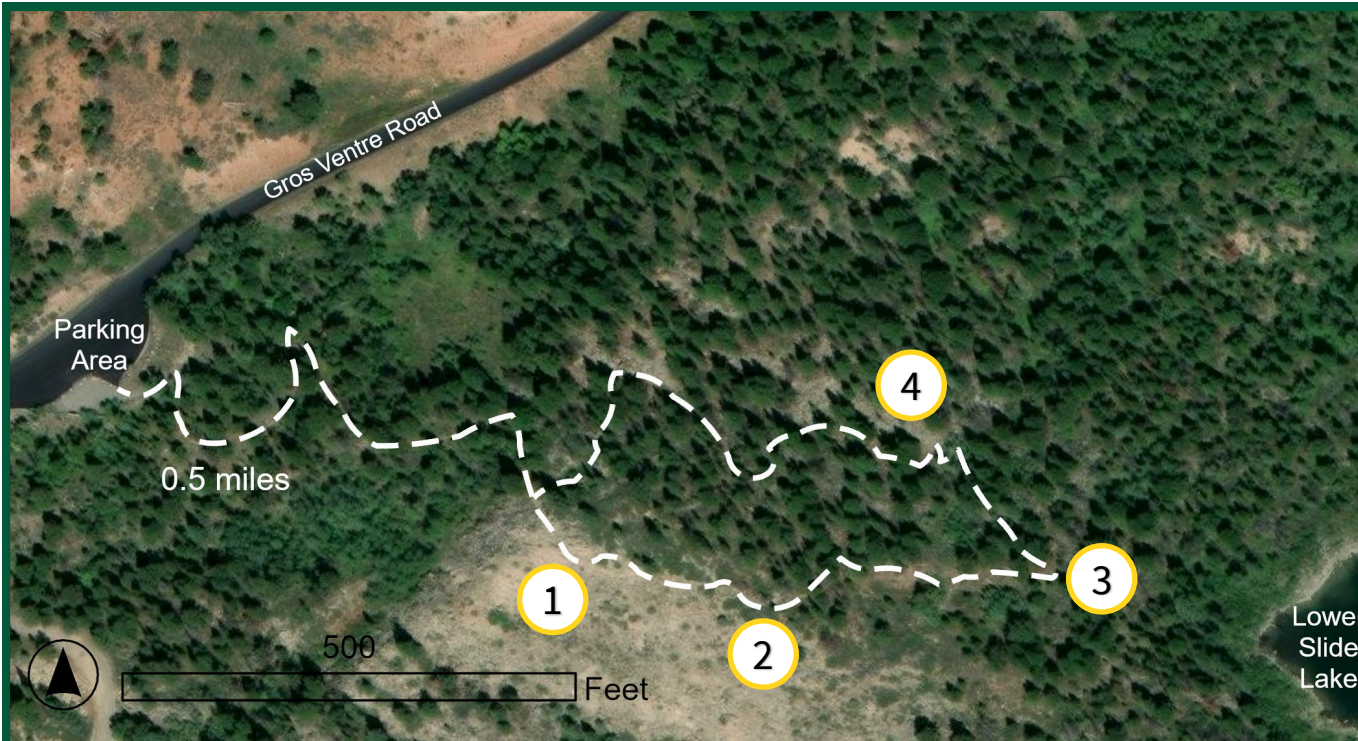
## GROS VENTRE SLIDE Geological Area



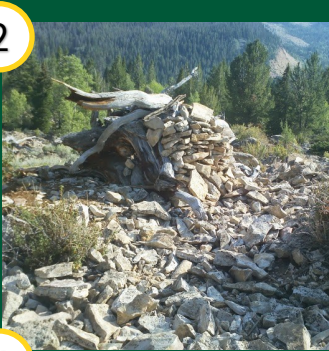
Kelly Elementary  
School

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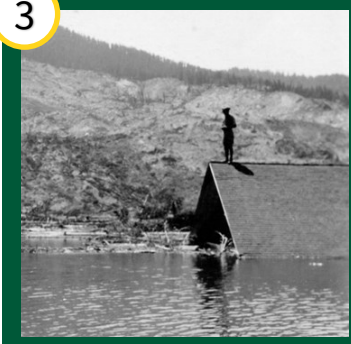
# Geology Trail Guide



You may find some crystals in the rocks below your feet. **Calcium carbonate**, the mineral that makes up limestone, is plentiful in the rocks of the Gros Ventre. Water that was rich in calcium carbonate seeped through the sandstone. Some of the minerals were left behind to form **calcite** crystals. *Cool!*



Looking at all the rocks in front of you, it's hard to imagine how massive the landslide was. It released about 50 million cubic yards of rock from Sheep Mountain on June 23, 1925. That's about as large as 20 thousand Olympic swimming pools, 19 times the size of the Great Pyramids of Giza, or 5 million dump truck loads!

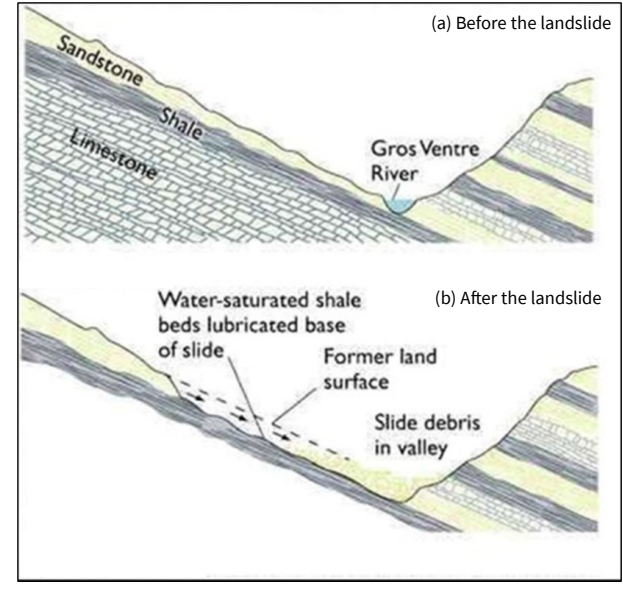


You are looking out at Lower Slide Lake, which was formed after the landslide. Many historic families have a connection to the lake. They may have ancestors who lost their farming land with the rising lake levels, like Guil Huff (left), or been flooded out of their home in Kelly when the dam broke in the spring of 1927 flood.



Have you seen this cute furry little face or heard it's high-pitched "meep"? This is a **pika**, an alpine animal in the rabbit family. Pikas usually live at higher elevation in the mountains. They appear here because the landslide provided the perfect habitat that they enjoy: rocky slopes and talus fields.

# Geology of the Slide



Two types of rocks were involved in this slide: **sandstone** and **shale**. The rock under your feet is mostly sandstone. Pick up some sandstone and look closely. You will see that sandstone is made up of ancient sand that has been cemented together. The spaces between the sand grains soak up water like a sponge. Try putting a drop from your water bottle on the stone you're holding and see how it soaks up the water. When the springtime snow melt saturated the sandstone and the shale below, it triggered the sandstone to slide along the shale surface underneath it, just like a kid on a waterslide!



The Gros Ventre Slide