

Cave Basics

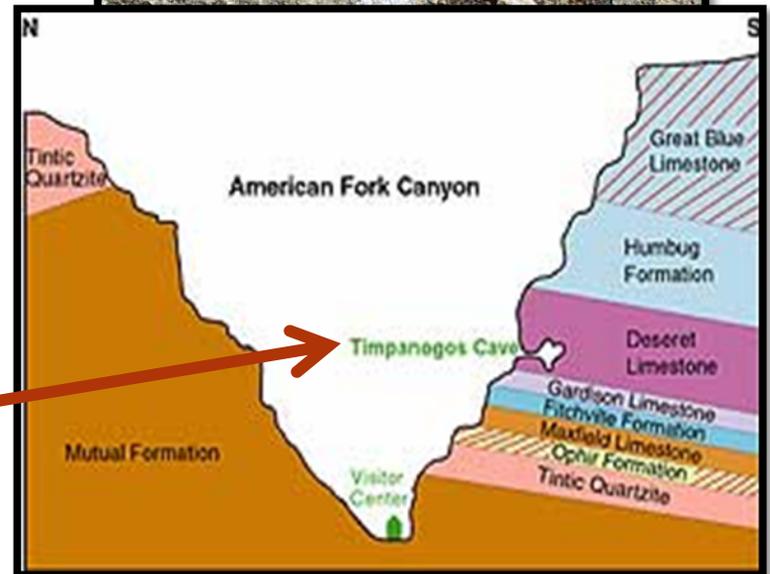
Do you know what's going on in
Timpanogos Caves?

By: Diantha Smith, 2009



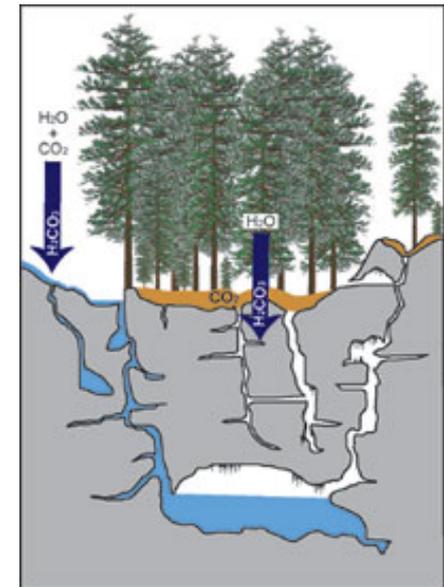
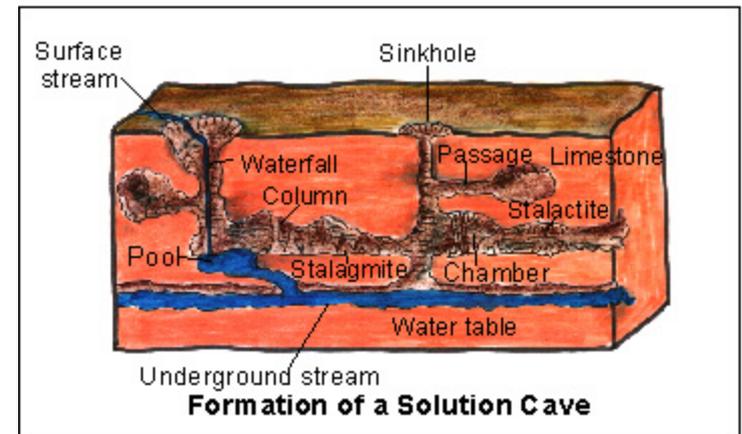
How did fossils get in the caves?

- The fossils show us that Utah was once part of a shallow sea where fish and other sea creatures lived.
- When the creatures died their bodies floated to the bottom and after a long time huge layers of shells, plants and organisms built up.
- All those layers smashing on top of each other made the sedimentary rock limestone.
- Timpanogos Cave is in a layer of Deseret Limestone.



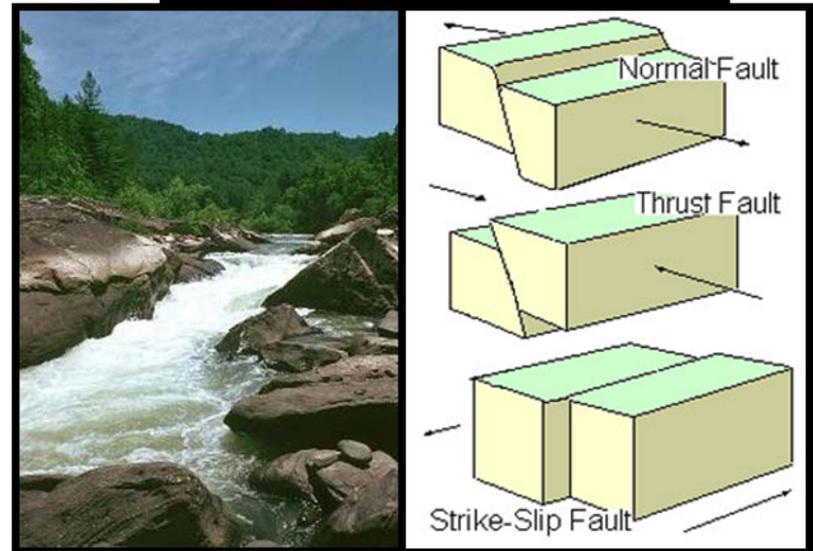
What made the holes in the rock?

- As the continents shifted northward, huge plates of rock smashed together forming mountains and new fault lines.
- Water flowed into the faults from underground lakes and/or rivers.
- Water picked up carbon dioxide from the air or from plants in the ground and made a weak acid called carbonic acid.
- Carbonic acid ate away the rock until it created an opening to the outside air.



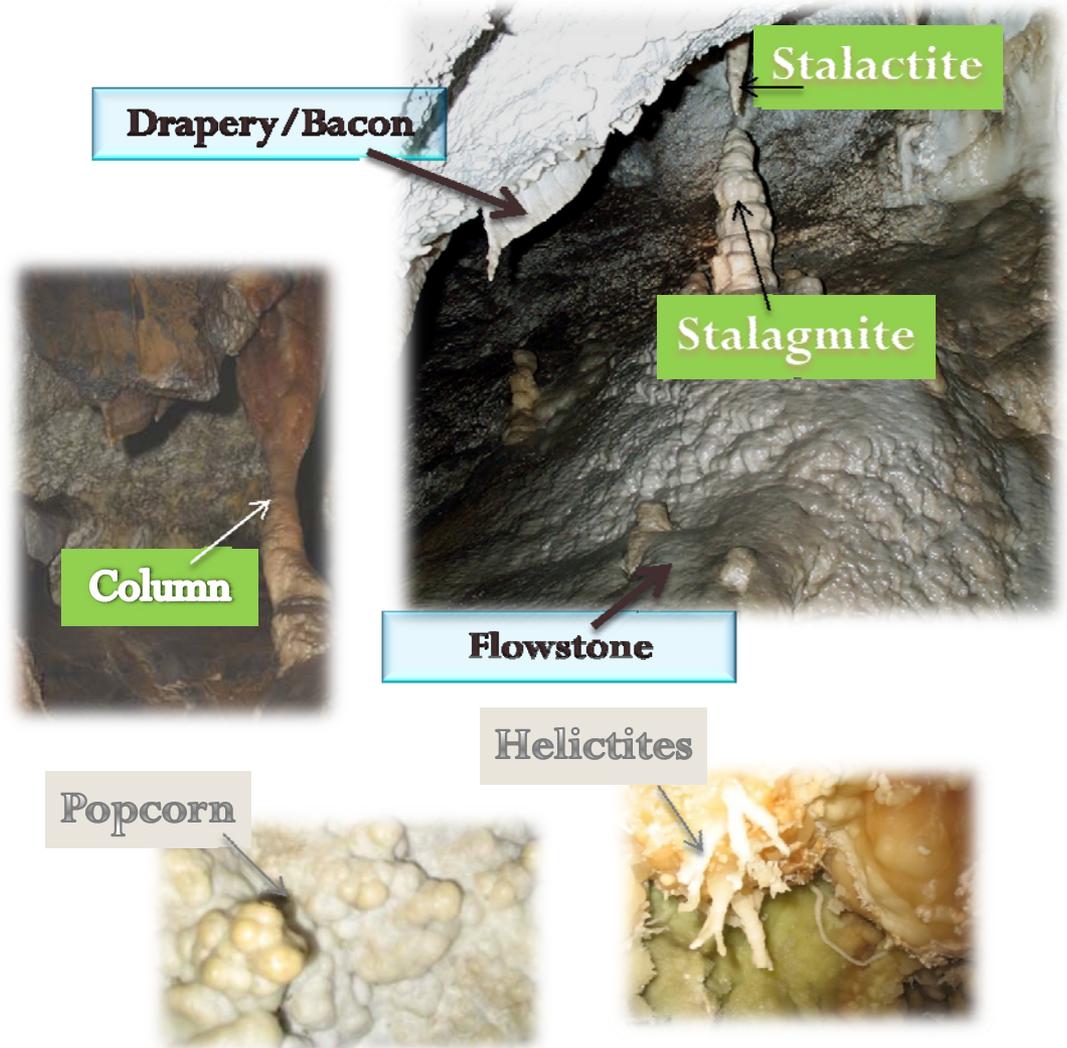
How did the caves get so high?

- Pressure built up along the fault lines and the land began to uplift.
- The cave was pushed higher and higher in the mountains.
- At the same time, the river cut the canyon deeper and deeper.
- The mountains are continuing to grow higher, but erosion is breaking them down at the same time.

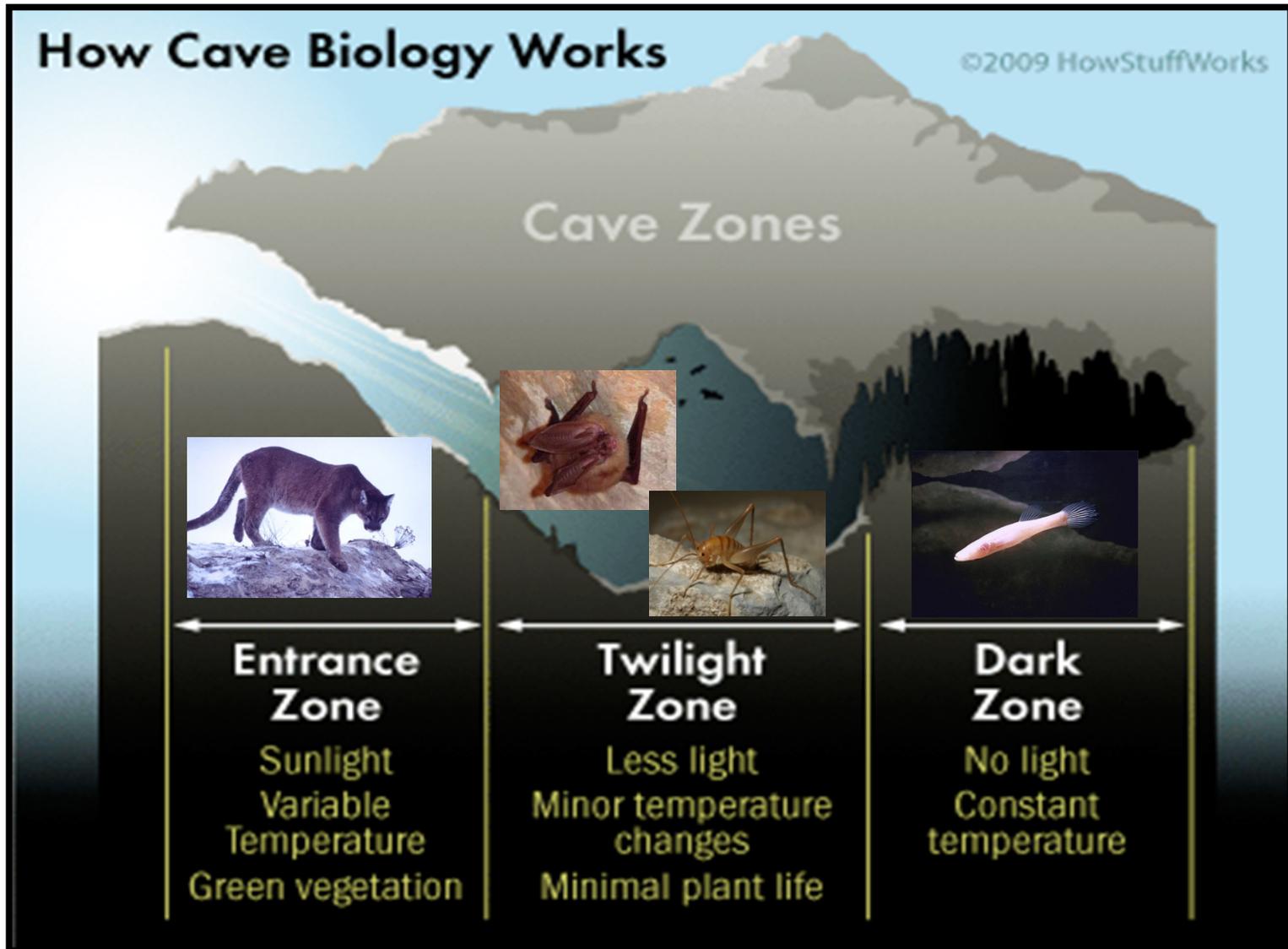


How does water shape the rocks in the caves?

- Dripping Water**
 - Stalactite
 - Stalagmite
 - Column
- Flowing Water**
 - Drapery/Bacon
 - Flowstone
- Seeping or Evaporating Water**
 - Helictite
 - Popcorn



What lives in caves? Not TICA specifically



What is the future of the caves?

- Formations grow slowly, but as long as water is moving through the cave they will get bigger and bigger.
- Stalactites and stalagmites grow together to make columns.
- Eventually the entire cave may fill up with calcite.
- Or the outside rock may erode away to expose the cave.



THE END



- **Sources**

- <http://animals.howstuffworks.com/animal-facts/cave-biology2.htm>

- <http://www.enchantedlearning.com/geology/rocks/glossary/>

- <http://www.scienceviews.com/parks/timpgeologichistory.html>