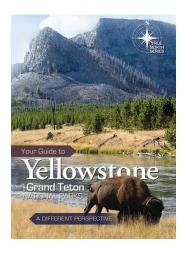
Creation Vacation

Yellowstone/Grand Tetons

Each year millions of people from around the world come to see these national park's beauty and wonder! Secular scientists attribute this to natural processes over millions of years. Yet, if we go beyond the beauty we will see these parks show the Genesis Flood and subsequent Ice Age. Come and look with your biblical glasses and give glory to God.

Be sure to purchase *Your guide to Yellowstone and Grand Teton National Parks* by Hergenrather, Vail, Oard, Bokovoy.

This book views the parks from a biblical perspective; there was a worldwide Genesis flood which produced the one and only Ice Age. The notes below are a supplement to the guide book. So, use both and have a great creation vacation!



On the way to Yellowstone you may want to stop at:

<u>Ashfall Fossil Beds, Royal, Nebraska</u>: 86930 517th Ave, Royal, NE 68773 Volcanic ash preserved rhinoceroses, horses, camels, dogs, saber-toothed deer, giant tortoises. This is an active paleontology dig being conducted by the University of Nebraska State Museum. This state park is located in NE Nebraska, about 7 hours from Twin Cities. Closed some Sundays and Mondays. Open May through mid-October. Requires an \$8.00 vehicle permit and \$7.00 per person entrance fee. http://ashfall.unl.edu/visit.html

Thermopolis, Wyoming has two places

1. <u>Dinosaur museum</u>-(one of the best dinosaur museum I have seen! Worth the stop)

Have you considered

-how a fossil is made. A fossil is a rock. It takes very special conditions to make a rock or fossil. Think about this, what happens to a dead animal? Scavengers eat it; bugs and bacteria cause it to rot and decay, eventually leaving no remains behind. It takes very special conditions in order to make a fossil. Here is the general fossil recipe:
- 1. Fast coverage by sediment. So, scavengers and bacteria don't eat it.
- 2. Deep coverage by sediment so no oxygen is present to start decay.
- 3. Lots and lots of water so the minerals can be dissolved and seep into the bone and turn it into stone.

What event in history had fast, deep coverage with lots of water? The Flood of Noah's time. Every time a fossil is dug up, it is a reminder of the Genesis Flood. Fossils remind us of God's judgment and God's mercy. God's judgment in that He destroyed the entire world with a worldwide flood because it was so wicked. "the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually". Genesis 6:5. God's mercy in that He saved Noah and his family on the Ark.

2. Hot Springs State Park (no fee) Just a quick stop to see:

How long does it take for large mineral formations to form? In 1903, in the town of Thermopolis, Wyoming, USA, someone drove an iron pipe into the ground, allowing the underground mineral-rich waters to escape. As the warm mineral waters flowed out the top of the pipe, the water evaporated leaving behind the minerals, depositing travertine. Now the travertine rock mound is about 24 feet tall. Why does this rock formation, called Teepee Fountain surprise visitors? It did not take millions of years to produce. It just took the right chemical environment to make this monstrous mound. The 104°F State Bathhouse is free. 168 Tepee Street, Thermopolis, WY. Flip-flops, bathing suit, and towel needed. Sulfur smell. Limited to 20 minutes. Buffalo and swinging bridge.

http://creation.com/a-monstrous-mound-of-minerals

Red Gulch Dinosaur Tracksite, Greybull, WY: See dinosaur tracks (free) on BLM land. Located west of the Big Horn Mountains in the Bighorn basin. Travel approximately eight miles east of Greybull WY (or four miles west of Shell) on US Highway 14 to the Red Gulch/Alkali National Back Country Byway turnoff. Head south on the Byway approximately five miles. Bring water to pour on the tracks so you will get better pictures. 44.462381, -107.815654 https://www.blm.gov/visit/red-gulch

Beartooth Mountain highway (Hwy 212): Recommended: Start at Red Lodge, Montana and go to Cooke City (NE entrance of Yellowstone). This is one of the most beautiful drives with spectacular scenery and several switchbacks. Along the way see glacial valleys, alpine lake, snow, tundra blossoms along with wildlife. The reason you can drive on the top of this mountain is because it is relatively flat. Notice as you drive, the surrounding mountains look to be planed off, and they were. After the mountains rose, the Flood waters eroded the mountains off in sheets (planation surfaces). Sheet erosion would have produced waters moving as freeway speeds and be hundreds of miles across planning the surface flat; that is the reason this "flat" highway is on top of this 13,000 foot mountain. There is one mountain that was eroded by glaciers and it looks like a bear's tooth, hence the Beartooth Mountains. Be sure to stop at the Rock Creek Vista spectacular, don't overlook this overlook! It is about 20 miles into the drive and near the top of the first set of switchbacks. It will take 2 ½ -3 hours to drive the 68 miles from Red Lodge to Cooke City.

http://beartoothhighway.com/beartooth-highway-maps/

<u>Along the way stop at **Beartooth Butte**</u>: elevation 10,514 feet. Bands of sandstone, 1,600 feet thick, on this butte give evidence that this area was covered in sedimentary layers and then most were washed off as the mountains rose late in the Flood. These same layers are found across the continent sitting on top of the granite basement rocks.

Cody, Wyoming: At East entrance to Yellowstone National Park

1. Heart Mountain Landslide: Imagine a landslide about the size of 1/3 the size of Rhode Island speeding toward you at 200 mph. How can a mountain move so fast? "The World's largest landslide floated like a hovercraft" so said the scientific article. This 425 square mile block 1.2 to 2.5 miles thick, slid some 28 miles, in about 8 minutes, from Cooke City, MT, to near Cody, WY where it broke into about 100 pieces, some over 5 miles in length. One of the pieces is now called Heart Mountain. Another is called Sheep Mountain. The slope it was traveling on was 2 degrees or less. How could this happen? Landslides need a 45-degree slope or greater. Laboratory experiments found that when mimicking the speed of the landslide, limestone and dolomite were crushed under high pressure, these rocks then released a gas, carbon dioxide. This gas acted like a frictionless cushion, letting the mountain blocks float over the landscape like a hovercraft. We do not see this type of process happening today. Towards the end of the Genesis Flood, violent earthquakes with a vertical uplift would have likely dislodged this block. The breakaway point can be seen just outside of Cooke City on the way to the northeastern entrance of Yellowstone. (No sign points out the Heart Mountain Detachment site). From this event, we learn that geological changes can occur catastrophically!

https://www.livescience.com/49504-heart-mountain-landslide-air-cushion.html

2. **Shoshone Water Gap**: As you travel west of Cody notice the mountain range ahead. You are driving through a gap in the mountain. The Shoshone River could have easily gone around the mountain range but instead went through it. How could it?

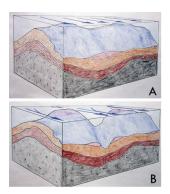
Water and wind gaps are common geological features found worldwide, yet they are a mystery to many scientists of how they were formed. A wind or water gap is a shallow notch in the upper part of a mountain ridge. The notch is an erosional notch and not one caused from faulting. Water gaps have rivers running through while wind gaps have wind. In central Wyoming, the Sweetwater River flows through a granite ridge. How did the river cut a channel some 330 feet deep? The deepest water gaps in the world are through the Himalaya Mountains; one of these water gaps is found on the Arun River which carves a water gap 4 miles deep and 13 miles wide. How does a river cut through a mountain ridge? They can't but, if you put on your Biblical glasses and view these gaps with the Genesis Flood in mind the answer can be found. At the end of the Flood as the mountains rose the flood waters decreased and were channelized. This cut a notch in the ridge. As the waters continued to be channelized the notch became deeper and wider forming a gap. All over the world we find water and wind gaps; but of course we would, the Flood was a worldwide, powerful event.

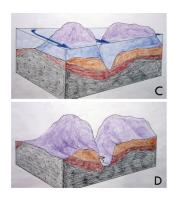
Note: The Appalachian Mountains have 1,700 water gaps i.e. Cumberland gap, Delaware gap.

"And the waters receded continually from the earth. At the end of the hundred and fifty days the waters decreased." ~ Genesis 8:3

Flood by Design, Mike Oard, 2008, p.95-108.

https://creation.com/do-rivers-erode-through-mountains







Yellowstone National Park www.yellowstonepark.com/park/fees

Yellowstone: Mammoth Hot Springs area

- 1. Mammoth Hot Springs: hot spring terraces During the Flood, lime mud was laid down. It turned to limestone. Today water from snow and rain percolate down and is heated by the magma below. It then begins rising and carbon dioxide gas from the magma dissolves in the hot water forming carbonic acid. This dissolves some of the limestone. The hot water with the dissolved limestone is then brought to the surface and deposited. The carbon dioxide escapes and the limestone forms these terraces. Limestone from hot springs that precipitated out and hardened is called travertine. (One can buy travertine tiles at tile stores). Mammoth hot springs waters travel through limestone, not rhyolite (igneous rock). The Grand Canyon of the Yellowstone is made of rhyolite which has been chemical altered by hot springs, resulting in the yellow color.
- 2. River bathing in Boiling River (5 minutes north of Mammoth in Yellowstone on Hwy 89)
 River bathing area is located about half a mile upstream from the car park. A flat dirt path is an easy scenic walk along the river and can't even be called a hike; it shouldn't take you more than 10 minutes. Most people walk here in their flip flops. https://fullsuitcase.com/boiling-river-yellowstone/



Tower Falls area

- 1. <u>Tower Falls</u>: Due to erosion you no longer can hike to the base. View the 132-foot falls from above by the general store. It is a football field length walk from the parking lot. While there look across the river and a bit north of the falls to see basalt columns. This geological feature looks like columns. How are they formed? Flood basalts (lava) poured out on to the earth. Then is cooled. As it cooled it cracked forming these columns. Columnar jointing can be found worldwide. Columns can range from 3 to 8 sided, with 6 being the most common.
- 2. <u>Lamar Valley</u>: great for viewing wildlife: bison, bear, wolves... For best viewing plan to be in the area a half hour before sunrise to shortly after.
 - a. **Pebble Creek Campground in Lamar Valley**: The people that camp here know about getting up at 4:30 am and taking a short drive to set up spotting scopes before dawn to see the wolves playing as they begin their day.
 - b. **Specimen ridge**, hike to see petrified trees, get directions, rigorous hike.
- 3. <u>Petrified tree</u>: Dr. Harold Coffin did more than 25 years of research to try to understand the petrified trees. Here is a 30-minute interview with him https://www.youtube.com/watch?v=FQcCeF5qlR8

Specimen Ridge in Yellowstone National Park is an area where there are up to 27 rock layers containing vertical petrified trees. Such vertically standing trees are often extending upward through multiple sedimentary rock layers. It has been historically taught that Specimen Ridge is the result of tens of thousands of years of Earth history - as multiple forests grew one on top of another. Yet the facts point to a better explanation.

- Trees from different levels contain the same growth ring pattern, indicating they grew at the same time
- No true soil layers between any of the 27 layers
- There are no root balls at the bottom of any of these trees.
- Very little bark is on the trees
- No branches remained, it looks as if they were broken off

It appeared that these trees were ripped from the ground and the branches broken off.

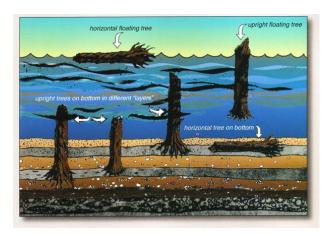
Dr. Harold Coffin noticed all these things and more about the petrified trees on Specimen Ridge. Then on May 18, 1980, Mt. St. Helens (Washington state) erupted; that volcanic eruption proved to be the science he needed.

What Mt. St. Helens taught us about burial of trees in an upright position.

On May 18, 1980 an earthquake caused a landslide on Mt. St. Helens which released a steam blast. Because the north slope of the volcano was now open, the steam blast was direct north over the landscape. The blast moved as a hot ground hugging current at speeds over 650 mph knocking down millions of trees over 200 square miles within 10 minutes. The landslide arrived after the trees were blasted down, it hit Spirit Lake which caused the lake water to be propelled up the mountain side 860 feet. This water scoured the area clean of the trees. As the waters rushed back into its basin it dragged with it the downed trees. An estimated one million large trees were now floating on Spirit Lake. As they became waterlogged, they righted themselves and sank to the bottom of the lake. In 1985, 20,000 were found to be in an upright position at the bottom of the lake. If the lake were drained, it would appear to be like a forest. Sediments at this time were continually draining into the lake, so the trees landed on different levels of the sediment. If this were exposed later, it would appear that there were different ages of forests instead of one time period. Petrified trees as Yellowstone Specimen Ridge has 27 different levels of trees, which evolutionists say are 27 different forests over ten of thousands of years. (The sign stating this has since been removed.) Mt. St. Helens taught us that trees can be buried in an upright position giving the appearance of having grown in that position, be in various layers of soil, yet be from the same time period.

The sign at the petrified tree shows a picture of Mt. St. Helens trees being ripped off.





Footprints in the Ash by Steve Austin https://www.icr.org/article/mt-st-helens-catastrophism/

Grand Canyon of the Yellowstone area

Why is Yellowstone called Yellowstone? Hydrothermal (hot waters) altered rhyolite (igneous rock) causes the yellow color.

- 1. South rim drive: Be sure to see **Artist point** breathtaking! Also, don't miss Uncle Tom's trail with a ½ mile descent to the bottom of the canyon.
- 2. North Rim drive one-way: Stop at Red Rock Point, Grand View, Inspiration Point, and the enormous glacial erratic which came from the Beartooth Mountains.

Lower, Middle and Upper Geyser Basin

- 1. Old Faithful and several other geothermal features. See web site for the approximate times of these geyser eruptions.
 - https://www.nps.gov/yell/planyourvisit/geyser-activity.htm

- 2. Black Sand Basin: don't get so excited about Old Faithful that you miss this excellent, nearly flat, .3 mile hike
- 3. West Thumb: Fishing cone in the lake. Here in the past, fisherman would fish off the cone and once they caught a fish would put it in the cone with its hot spring to cook and eat it.



4. Grand Prismatic Spring at Midway Geyser–gorgeous, to see a view from above it looking down, take the <u>Fairy Falls trail</u>, which is located 1 mile south of Grand Prismatic



To really appreciate the beauty of Grand Prismatic Spring, you must view it from higher ground—this can be accomplished by hiking a portion of the Fairy Falls Trail. To access the trail, drive to the Fairy Falls parking area, walk across the steel bridge that spans the Firehole River, then continue hiking for about **one mile** until you see the Midway Geyser Basin on your right. At this point, take the trail on your left to the viewing platform, and you will be rewarded with out of this world views of Grand Prismatic Spring!

- 5. Firehole Lake Drive 3-mile, one-way side road- great!
- 6. Norris Geyser Basin study before to know what you want to see www.nps.gov/yell/learn/photosmultimedia/norris-geyser-basin-tour.htm

During the Flood of Noah's day not only was the earth covered with water but with many volcanoes. In fact, you can travel to the very throat of one these super volcanoes, Yellowstone National Park. That's right, almost the entire park is a collapsed volcanic cone or caldera. It is 44 miles long and 34 miles wide and cover 1500 square miles in area. Image this super volcano spewing out ash and lava!

Evolutionary geology believes in enormous time periods, so it places the eruptions that formed the Yellowstone area at 2.1,1.2, and 0.64 million years ago. Yet these dates are based on dating methods that have been proven to be both inaccurate and subjective. The fact that the collapsed caldera of Yellowstone remains geologically active-with geysers, mud pots, hot springs, and fumaroles -actually testifies to its recent formation during the Flood of Noah's

about 4400 years go. It remains hot and active because the eruption which created this area DID NOT occur millions of years ago. The underground magma remains hot and close to the surface because the entire area was recently created.

Grand Teton National Park:

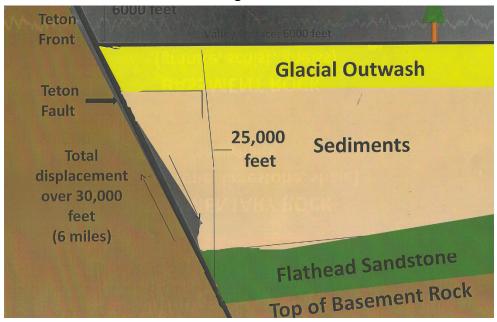
Did you notice **no foothills** here at the Grand Teton National Park? Towards the end of the Flood of Noah's day there would have been earthquakes and the rising and lowering of land. At the Teton Fault, "The mountains rose, the valleys sank down to the place that you appointed for them." Psalm 104:8, creating the Grand Teton mountain range and Jackson Hole. Hole is just another name for valley. The displacement (uplift of mountains and drop of valley) was about 6 miles. As the Flood waters came off the continents, Jackson Hole was filled with sediments, later the Ice Age sent glacial outwash to cover the valley.

The Teton Mountains experienced a tremendous uplift of the basement or creation week rocks (granite and gneisses). On the flanks of the 40-mile-long Teton range are 2,000-foot-thick sedimentary rock layers. These rock layers used to cover the Tetons but were eroded away when the Teton Range rose out of the Flood. Jackson Hole filled with 25,000 feet of sediments. The Ice Age started after the Flood. Yellowstone had an ice cap and the Tetons had valley glaciers. The Ice Age lasted about 500 years. We can see some of the Ice Age glacial runoff terraces in Jackson Hole area; the Snake River overlook is an excellent place to view such.

Below is a chronology of the geological event shaping the Grand Tetons:

- 1. Creation week: formation of the basement rocks of granites. When looking at the Tetons that is what you primarily seeing the creation week rocks.
- 2. At the beginning of the Flood there would have been the planing off of the basement rocks then, thousands of feet of sedimentary rock layers were laid down all over the earth.
- 3. During the second half of the Flood, mountain ranges rose, and basins dropped, including the ocean basins. At this stage the Teton Range uplifted, and Jackson Hole dropped down with a total displacement of 30,000 feet (about 6 miles).
- 4. The uplifting of the mountains produced strong water currents. Massive erosion and deposition took place, boulders and sediments were swept along for hundreds of miles. Jackson Hole filled with 25,000 feet of sediments.
- 5. As the mountains continued to rise, water levels dropped, and the water became channelized. Now major valleys were cut.
- 6. During and after the Flood, earthquakes and volcanic eruptions took place. Yellowstone had three super volcanic eruptions which spewed ash over most of the western USA.
- 7. The one and only Ice Age was caused by the Genesis Flood, 500 years of extensive snowfall and ash clouded skies for ice buildup and 200 years to melt down. Yellowstone experienced 3,000 feet thick built up of glacial ice which moved south to Jackson Hole.

Smaller valley glaciers developed in the mountains carving u-shaped valley and pushed their moraines out onto the glacial outwash terraces.



From CreationEncouter.com

What causes an Ice Age?

Have you considered what causes an ice age. First, an ice age is when the winter's snows do not melt each year but are continually added. It takes very special conditions to make an ice age. So, what are the conditions needed for an ice age to develop? Lots of warm oceans and volcanic ash. What event in history would have lots and lots of warm water and volcanic ash? The Flood of Noah's time. During the Flood, the fountains of the deep burst opened which brought great quantities of hot water to the oceans. Add to that, volcanoes erupting, of which, 90% of the eruptions are water; again very hot waters were being added to the oceans. These volcanoes also spewed great quantities of volcanic ash into the air; these particles would reflect the sunlight back into space making the continents cooler. These warmer oceans would cause lots of evaporation. Then winds would carry the moisture onto the cold continents. The cold continents would cause the moist air to condense and fall as snow. Snow on the ground would not melt during the summer. Each year the snows would build up. Just after the Flood, ice sheets would have formed quickly around the world in the higher latitudes such as Greenland and North America. As the earth settled down and the volcanoes stopped erupting, the volcanic ash would dissipate out of the air, eventually the sun would shine on those ice sheets and the snow would melt. Creation scientists have calculated the one and only Ice Age to lasted for 700 years, 500 years to build up and 200 years to melt down. What causes an ice age? Very special conditions. An ice age needs lots and lots

of warm water and volcanic ash. What event in history would have these two ingredients? The Flood of Noah's time.

Frozen in Time: The Woolly Mammoth, the Ice Age and the Bible, Michael Oard, 2004.

What to see:

- 1. The Grand Tetons are the basement rocks/creation week rocks.
- 2. Take the <u>aerial tramway from Teton Village</u> to the top of Rendezvous Mountain. Bring sweatshirt.
- A. Here you will see the creation rock/basement rock (granite and gneisses) and the Flood rock (sedimentary layers).
 - B. Great place to view uplift and lowering of the valley. The displacement would have been 6 miles (30,000 feet) which is like looking out the window of a commercial jet and seeing the ground. Imagine this as you stand on this mountain top viewing the valley below (remember the valley prior to the infilling would have been 23,000 feet lower).
 - C. Also take note of the sedimentary layer named Madison limestone. This same layer is found in the Grand Canyon. The <u>Redwall limestone</u> of the Grand Canyon is equivalent to the Grand Tetons <u>Madison limestone</u>, just different names, but one extensive layer laid down by what would require a world-wide flood.
- Also, notice how the layers look like they are pancakes stacked on top of each other. The boundaries between the layers are straight showing little erosion. If these had been laid down over millions of years, there should be erosional features on the contact boundary. The limestones have marine fossils. What are sea creatures doing on top of a mountain? Marine creatures were caught in the Flood of Noah's day and became fossils. Later the mountains roses bringing sea creatures to the top of the mountain. (Every major mountain range in the world has marine fossils.)



Teton sequence

Grand Canyon Equivalent

1. Madison Limestone

1. Redwall Limestone

2. Darby Fm (limestones, dolomites) 2. Temple Butte (limestones, dolomites)

3. Bighorn Dolomite

3. Unnamed Dolomite

4. Gallatin Limestone

4. Muay Limestone

5. Gros Ventre Fm (incl shales)

5. Bright Angel Shale

6. Flathead Sandstone

6. Tapeats Sandstone

3. <u>Cathedral Group turnout</u>: just north of Jenny Lake

- **A.** Mr. Moran has a sandstone cap called Flathead sandstone. This sandstone once covered most of North America and can be found in the Grand Canyon. It goes by the name of Tapeats Sandstone in the Grand Canyon.
- **B.** Flathead sandstone on Mt. Moran is also found buried 23,000 feet below in Jackson Hole. Showing us the displacement of 6 miles or 30,000 feet. This is equivalent of flying in commercial jet and looking at the ground. Truly the land was going through great upheavals; the safest place would have been on the Ark with Noah!
- 4. **Jenny Lake**: take the boat ride across the lake to Hidden Falls a ½ mile hike, if you continue another ½ mile you arrive at Inspiration Point, another 1 mile you arrive at Cascade Canyon (one of the most spectacular glacier carved u-shaped canyon in the Tetons). Total of 2 miles one way.
- Walking around Jenny Lake on the moraine (a moraine is the ridge of dirt pushed up by a glacier) created by the Cascade valley glacier. It is about 6 miles round trip, fairly level. https://www.nps.gov/grte/planyourvisit/upload/Jenny_Lake_topo.pdf
 - 5. **Snake river overlook**: GPS 43.751941, -110.625205 a great place to see the glacial outwash terraces left behind by the Ice Age. The size of these terraces testifies to the magnitude of these glaciers.
 - 6. Chapel of Transfiguration (near Moose Junction) this log chapel was built in 1925 to service the dude ranches in the area. It was built to frame the Cathedral group of Tetons. Sunday services are still done. What a beautiful place to worship our LORD. See website: www.stjohnsjackson.org/chapel-of-the-transfiguration/



7. <u>Mormon Row</u> (near Moose): Has the "most photographed barn in America". Go to Moose Junction, continue north on 191 about 1 mile to Antelope Flats road go right to Mormon Row about 2 miles.



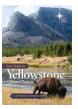
8. Quartzite rock with percussion marks. Look around for rounded rocks, they are most likely quartzite.



Have you considered quartzite boulders speak powerfully of the global Flood? Quartzite rocks were once sedimentary sandstone but become a hard-metamorphic rock under heat and pressure. (Quartzite is not quartz. Quartz is a mineral). Billions of rounded quartzite boulders and cobbles are found scattered throughout the northwestern United States and western Canada. Where did they come from? The nearest source of quartzite rock is near the Continental Divide in Montana, Idaho and British Columbia. Yet we find them scattered eastward and westward some 300 - 600 miles from their source. Many of these hard quartzite rocks have percussion marks indicating violent collisions during transport in deep moving waters. Two geologists asked themselves what sort of current would be needed to carry boulders over 600 miles into Saskatchewan and North Dakota. They calculated that rocks 6 inches across would require currents of at least 65 mph and a water depth of 200 feet. These rates are unbelievable considering that a modern-day flash floods seldom exceed 20 mph. These billions of quartzite boulders distributed 300-600 miles from their source are powerful evidence for the watery catastrophe of the Genesis Flood.

Creation Magazine, "Noah's Long-Distance Travelers", John Hergenrather, June-August 2006, pp. 30-32.

Be sure to purchase *Your guide to Yellowstone and Grand Teton National Parks* by Hergenrather, Vail, Oard, Bokovoy AND a copy these notes when going to these parks.



Enjoy your creation vacation!