

Theodore Roosevelt National Park, ND

South Unit:

Painted Canyon Visitor Center, just off I-94. This gives a panoramic view of the multicolored strata. The horizontal layers are beds of sedimentary rocks. Read about in the Badlands of SD (see page).

Petrified Forest hike: This park claims it has the nation's third greatest concentration of petrified logs and this is quite believable! This hike will take you to a remote place with a high concentration of logs and stumps, many gigantic! These petrified trees are sequoia and bald cypress. What aren't cypresses, found in swampy Florida? North Dakota is hot and arid during the summers and frigidly cold during the winters. The environment must have been very different before the Flood of Noah's day. Notice the logs have no roots and no branches. The jumbled mess of petrified logs testifies to a violent flood that ripped the trees up and moved them around! They did not grow here but were probably rafted here and then covered with sediments and became petrified. Get the shorter hiking directions from the visitor's center, it is well worth it! Remember no collecting, let future generations enjoy the awe.

Just a note, nearby is the town of Dickenson. While I-94 was being constructed the workers uncovered a gigantic petrified log, 120 feet long and 10 feet in diameter at the base. This definitely would be one of the largest petrified logs ever found. Time did not allow them to dig it out so, they buried it. Perhaps someday someone will dig it up. (*Petrified Wood in the USA*, Arthur Manning, 2002, p.57-59)

36-mile Scenic Loop Drive:

Milepost markers show the mileage from the entrance to the park.

3.3 Prairie Dog Town see article on prairie dogs.

4.2 Skyline Vista: Notice the flat area on which this overlook is located. The Little Missouri River flows in the valley below.

5.4 River Woodland Overlook: The cottonwood and willow trees grow close to the river. This provides shelter for wild life such as white-tailed deer and birds. The open area is filled with sagebrush which provides space for hawks, songbirds, and mule deer. Throughout the park certain trees grow in ravines or coulees, these are green ash, wild plum, chokecherry, and box elder. Notice how some trees grow in horizontal bands in the hillsides; these are Rocky Mountain juniper trees. Why do they grow in horizontal bands? The hillside is made of layers of sediment, some sediment is looser and more permeable than others, this water comes to the surface where that layer is exposed and hence junipers trees grow with the moist conditions.

5.6 Cottonwood campground. Drive in; many times bison hang out here.

5.9 Lignite coal seam on the right, halfway up the slope. Coal seams can be seen throughout the park.

Have you considered how coal is formed?

Coal is the remains of once-living plants. Evolutionists will tell you that coal formation took place slowly in swamps over millions years. Yet, many of the plants found in coal would not grow in swamps. The plants found in swamps tend to stay together, while plants found in coal have been torn apart and separated into layers- roots, stems, leaves, seeds and pollen. Also today, we do not see swamps and bogs turning into coal.

So, how was coal made? During the Flood, huge amounts of vegetation was ripped up and torn apart in this cataclysmic storm. They were then deposited in layers along with other sediments. The weight of the other sediments above squeezed out the extra water, keeping the oxygen out, and raising the temperature of the buried plants. The plants then turned into coal. What happened to the pre-flood world's luscious plant life? Much of it turned into coal.

Many coal deposits show burial over a great area. For example Kentucky No. 12 runs from Kansas to Pennsylvania, halfway across America!

Coal-like features were seen when the volcano Mt. St. Helens erupted on May 18, 1980. This volcano produced a steam and ash blast that caused a huge wave in Spirit Lake to reach 860 feet up into the mountain side. The waters rushed back into the lake bringing with it about one million broken trees. The rocks, ash, and plant material began to settle out on the bottom of Spirit Lake- bark sheets in one layer, pollen, and spores in another...similar to what is seen in coal fields. If Spirit Lake were covered with more sediment, like with the Flood, then coal could have developed. Coal is found world-wide. Coal is a result of a world wide Flood.

(The Fossil Book, Gary and Mary Parker, 2005, p.14-16)

Did you know that coal has been carbon dated!

Evolutionists date coal to about 300 million year old, if that were true then no carbon -14 should be present. Ten samples of coal were collected from the major coalfields across America. These samples were analyzed for their C-14 content. In all ten samples carbon-14 was found to be present. Coal is not millions of years old, just thousands. Coal testifies to a recent worldwide Flood, about 3,500 years ago.

(Thousands not Millions, Dr. Don DeYoung, 2005, p.51-55.)

Just north of here are the rich oil fields. So much time does it take to make oil? Zero time! It already exists in plants (corn oil, olive oil...), in animals (whale oil...), microbes and people. So oil started as oil, it now had to get trapped. If it is not trapped, oil gets eaten by scavengers and decomposers, and no pools of oil form. Like with the olive oil to retrieve it, the oil is squeezed out of it. During Noah's Flood, billions of plants and critters were buried under huge amounts of sediments; this caused the oil to be squeezed out of the once living things. The oil separated from the water and continued to rise to the top. Oil can move fairly easily through the sand and lime, however, a dome of shale and clay can trap the oil, forming a pool of oil. The gathered oil is under great pressure, so when it is drilled into, the oil gushes out.

(The Fossil Book, Gary and Mary Parker, 2005, p.16-17.)

6.6 begin loop drive, continue to the road on the right.

8.8 Turnout on left. Notice how the juniper trees are heavy on the north-facing slopes. Why? The north-facing slopes generally are cooler and moister. The slopes on the south are drier because they receive more sunlight both in the summer and the winter causing the moister to evaporate before absorbed into the ground.

9.3 Scoria Point Overlook. Notice the reddish rock layers; these are sediments that were baked by burning lignite. The locals call it scoria but it should be called clinkers. True scoria is of volcanic origin, lignite is formed from compressed plant debris. Scoria (clinkers) has a variety of colors pink-red to orange, yellow and purple. Color is based on mineral composition, grain size and the baking process temperatures.

9.9 in the Badlands the buttes and other hills are often capped with scoria (clinkers) or sandstone which resist weathering.

10.8 Ridgeline Nature Trail: A 0.6 mile walk through a typical landscape of North Dakota Badlands.

11.4 North Dakota Badlands Overlook: Horizontal layers of sedimentary rocks. The Grayish-blue layers are beds of made of clay. Clay is derived from the decomposed volcanic ash. During the Flood, a tremendous number of volcanoes were erupting large amount of ash. Extremely fine particles of ash were caught in the Flood and laid down in these bluish layers. The ash then decomposed into bentonite clay. Commercially bentonite clay is used in hundreds of products such as kitty litter, candy bars, and toothpaste. It has the ability to soak up water and swell up to 16 times its size. When wet, bentonite clay is very slippery and gummy, making it very difficult to drive in. The brownish gray layers are made of sand. Black layers are lignite coal.

These layers were laid down during the Flood. As the Rocky Mountains rose up, water would run off the land in sheets; sheet erosion would plain the land. As the waters became less, they would become channelized thus carving out the land and to reveal the layers we see before us.

Look around you, look at the highest parts and then see the amount of dirt that had to be washout out of this area. Where is the washed out dirt?

12.0 Lignite coal bed: In the gully on the right. North Dakota has the largest reserve of lignite coal in the world. Thin seams are seen throughout the park.

16.2 Notice the layers of sediments. The reddish brown layers are rich in iron.

17.1 Buck Hill. Turn right and travel 0.8 mile to the top. A 100 yard foot trail leads to the very top of the hill. This gives a view of the badlands. Where did all the dirt go that has been eroded away?

19.9 Boicourt Overlook: Rocky Mountain juniper grow thickly on the north-facing slopes, more moisture is available than from the south-facing slopes.

Boicourt Overlook Trail is considered one of the most beautiful South Unit overlooks and is accessible by an easy nature trail. Rangers pick this as a favorite for a sunset over the Badlands.

20.5 Petrified tree: To the right near the bottom of the valley. It takes very special conditions for a tree to turn to stone. Would not a tree rot away in your back yard before turning into a rock? The Flood of Noah's day provided the special conditions in order for a tree to petrify.

24.8 East River Road: Turn left to return to Medora, finishing the loop.

26.6 Beef Corral Pullout. A guide book states, "This flat area is the old floodplain of the Little Missouri River". Did the Little Missouri River really fill this valley from edge to edge? This is a wide valley with a little river. It is common worldwide to find valleys

like this, where the river is much smaller than the valley. Geographers have given a name for this, “underfit valleys”. Underfit valleys are evidence of huge volume of Flood waters receding from the land and carving out these large valleys at the end of the Genesis Flood, later the river follows the carved valley.

28.8 Peaceful Valley Ranch: This historic ranch is to your right. During the 1880’s this was a working cattle ranch, then a horse ranch, a dude ranch, Civilian Conservation Corps (CCC) headquarters, Theodore Roosevelt National Park Headquarters and today a saddle horse concession.

29.1 End of loop. Turn right to Medora

North Unit: some 50 miles away.

14 mile scenic drive

4.6 Cannonball concretion Pullout: Giant red concretions almost 10 feet in diameter can be found having weathered out of the hillside. Read about concretions –Lemmon SD (*Roadlog Guide for the South and North Units TRNP*, Theodore Roosevelt Nature and History Association, 2005)

Have you considered petrified wood? It is not as rare as you may think. In fact it is an abundant fossil and found worldwide. To make petrified wood, wood needs to be buried in oxygen-poor sediment. Then water percolates through the ground bringing with it minerals. Cell by cell, the original wood is completely dissolved away and replaced. The ideal environment for wood to become petrified is burial by volcanic ash. Ash from the multitude of volcanoes erupting during the flood was carried to the Dakota/Montana area. Flood waters moved through the silica rich volcanic ash and sediments. This silica rich water soaked into the buried trees. The organic compounds in the wood dissolved and were replaced, turning the wood into stone which is called petrification. The color of the petrified wood depends on the minerals in the water and sediment. Arizona’s petrified wood is famous for its yellows and reds (from the iron minerals) and green and blues (from the copper). The petrified wood of the Dakota’s is creamy brown in color. Near here in Lemmon, South Dakota, there is a 1930’s gas station and a large museum all made from petrified wood, even some of the nearby roads are “graveled” in petrified wood. Petrified wood is abundant and worldwide, yet it rarely occurs today because of the special conditions required. What event in history would have worldwide deep burial of wood in a water saturated ground? The Flood of Noah’s time provides the answer. So as you stand in the midst the third largest concentration of petrified forest in the United States, realize that this is a result of the Flood of Noah’s day!

Also within many coal deposits are polystrate fossils. Polystrate fossils like tree trunks cut across many sedimentary layers. These polystrate fossils represent those plants caught in the Flood and buried in an upright position while more sediment filled in around. Evolutionists have a hard time explaining tree trunks existing for millions of years as the sediments covered them. Would the tree not rot over the millions of years as it stood there? The tree had to be catastrophic covered in order for it to become fossilized. The Flood of Noah’s day would have provided those special conditions for it to become a fossil.