Having done research many summers in Yellowstone, I welcome this beautiful guidebook as a fine addition to the series planned for the national parks. It has been my privilege to spend many days in this area with the authors of this volume and I can vouch for the many hours of field and library work represented here. You can expect an exciting trip as you explore the pages of this book and view the passing scenery. This volume will give you insights into many aspects of what you will see including the geology, ecology, and history. These insights will add much to your enjoyment and understanding.

It is my hope that the guidebook in your hands will aid you in developing a strong relationship with God and with His beautiful creation, as seen in Yellowstone and Grand Teton National Parks. The discussions herein will show you the close harmony of God’s Creation, His Word, and His created world.

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Dr. Harold G. Coffin, Paleontologist

THE TRUE NORTH SERIES:
YOUR GUIDE TO YELLOWSTONE AND GRAND TETON NATIONAL PARKS

First printing: March 2012

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For information regarding author interviews, please contact the publicity department at (870) 438-5288.
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Over the last 100 years, many books and guides have been written to help people understand Grand Teton and Yellowstone National Parks. The majority of them are based on long ages and evolutionary theory. The uniqueness of this True North Guide is in its perspective. It was written with three purposes in mind:

► To provide an understanding of what the visitor actually sees from the major overlooks of the parks
► To provide an overview of Grand Teton and Yellowstone National Parks from a creationist’s perspective and compare it to an evolutionary interpretation
► To show that what is observed in these parks is best understood by the creation/Flood interpretation

WHERE TO BEGIN

No matter how many times you have visited these parks, this True North Guide will help you get the most from your stay. It provides suggestions on how to plan your trip and how to see the parks once you arrive. The foldouts in sections five and six present site-specific information on what to see, along with general information about the area. A summary of what you will find in each section is provided in the following table.
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<td>Provides information on services, amenities, and interesting nearby attractions, which will help you make the best use of your time</td>
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<td>Summarizes some of the evidence seen in the parks that supports the biblical model, introducing you to 12 main evidences worthy of investigating as you consider the significance of these parks</td>
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<td>Contains three-page foldouts for the major overviews in both parks, with suggested itineraries for visiting each park based on your available time; foldouts offer brief explanations of what is seen from each overlook with references to other sections for more in-depth information</td>
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<td>Offers a brief historical background of man’s activity in and around the parks</td>
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GEOLOGY: Sylvan Pass is in the Absaroka Mountains, which mostly consist of nearly horizontal layers of volcanic breccias, conglomerates, and ash (pictured below). The extent of these layers is immense, covering about 9,000 square miles from east of Jackson Hole, north to the Beartooth Mountains, and then west to the Gallatin Range.

The thickness and elevation of the Absaroka Range are equally amazing. The volcanics are often 6,000 feet thick and the southern portions climax an 11,000-foot flat-topped, dissected plateau. Given an age of 50 million years by evolutionists, the Absaroka Volcanics are supposedly much older and not connected with Yellowstone's super-eruptions. If that were true, the question of this material's source remains unanswered.

Deep canyons have been cut into the Absaroka Volcanics, some of them over 3,000 feet deep! Since the layers originally stretched across the valleys, a tremendous amount of material has been eroded away. Also, vertical petrified trees are found at many locations within the Absaroka Volcanics (see page 160). Keep a close lookout along the road cuts of the highway and you may see some petrified trees, often of light brown color and in a vertical position.

Such extensive deposition, petrification of trees, and deeply eroded canyons are consistent with the massive volcanism and erosive power associated with the Genesis Flood. The valleys would have been carved late in the Flood as the channelizing water was draining off the continent. After the Flood, the Ice Age covered this region with as much as 3,000 feet of ice (see page 151). That is why Sylvan Pass and the valleys to the east are U-shaped, typical of glaciation. The Ice Age is one of the great mysteries of earth science, but can readily be explained by the climatic changes caused by the Flood.13

ECOLOGY: As elevation increases, the temperature decreases about four degrees F per 1,000 feet. Plants and animals have special adaptations to live in this cold environment. Pikas, as well as the marmots that live here, have entirely different ways of surviving the winter. Pikas do not hibernate like marmots, but rather live all winter on the "hay" they so industriously gathered, sun-dried, and stored during the summer. Only six to eight inches long, pikas are hard to spot, blending in well with the surrounding rocks. However, patient observation can be rewarding, as they often permit a close approach, especially if you move slowly. Also, a gentle voice seems to reassure this delightful little animal. Little is known about the pika's winter life, due to the inhospitable conditions in which they survive.

Who "taught" the marmot how to hibernate or the pika how to store food and survive the harsh winter? Evolution offers no good explanation for animal instincts. They are better understood as God-given instincts.

The broad grasslands and marshy meadows of Hayden Valley provide one of the best places in the park to see bison up close. In fact, "buffalo jams" are common as bison walk the roads, causing mile-long backups. They are the largest land mammal in North America, a fact easily appreciated as you drive close to them. For their size, they are very fast and adults can jump a four-foot fence! Bison cause the majority of injuries from animals in the park, so be sure to observe the 25-yard rule.
**Hayden Valley**

**GEOLOGY:** At the end of the Ice Age, a remnant of an ice sheet in northern Yellowstone probably blocked the Yellowstone River, making Yellowstone Lake deeper and larger. Hayden Valley would likely have been a northern arm of the lake at the time.

There are only a few geothermal features in this area, one of which is Mud Volcano, perhaps the smelliest place in the park. Its rotten egg smell is from hydrogen sulfide gas bubbling from the mudpot (see page 98).

**ECOLOGY:** Hayden Valley is one of the best places in the park to view wildlife. A patient observer may spot bears, wolves, elk, deer, bison, otters, and swans. Also American white pelicans enjoy summers on the Yellowstone River and Lake. Males weigh as much as 30 pounds and their wing-spans can exceed nine feet! Unlike coastal brown pelicans, which dive to feed, the white pelicans feed as they swim. They can often be seen working together using coordinated wing beating and bill dipping to “herd” fish to shallow water where they are more easily caught.

Vegetation on the valley bottom varies between dry sagebrush areas (F) and lush meadow grasses (C). The difference is their soils. The sagebrush areas have dry poor soils consisting of porous glacial deposits. The lush meadows have rich soils with fine-grained lakebed silts and clays favoring thick grasses.

The grasses and sedges of Hayden Valley provide excellent forage for bison. During mating season in late summer, it is interesting to watch bulls establish their dominance by charging each other, butting heads, and bellowing. The bulls also wallow in the dirt (D) during mating season as a display of strength.

Throughout the park, there are thousands of trees with missing bark (A). The majority of this is caused when bison use trees as scratching posts. Elk also use trees for scratching, while bears create territorial scent marks by clawing and even biting trees.

**HIKING:** Six road miles north of Fishing Bridge, a three-quarter mile loop trail features Mud Volcano, Dragon’s Mouth Spring, Churning Caldron, and Black Dragon’s Caldron. “Parking Lot Pool” began in 1999 when steam appeared through the pavement.

**FAST FACTS**

- The colors of the rhyolite lava walls are caused by hydrothermal effects on iron.
- Falling 308 feet, the Lower Falls is almost twice as high as Niagara Falls.
- Conventional radiometric dating has created a “time dilemma” for understanding this canyon.