

# Fossil Butte

## National Monument

U.S. Department of the Interior  
<http://www.nps.gov/fobu>



### Fossil Lake Trail

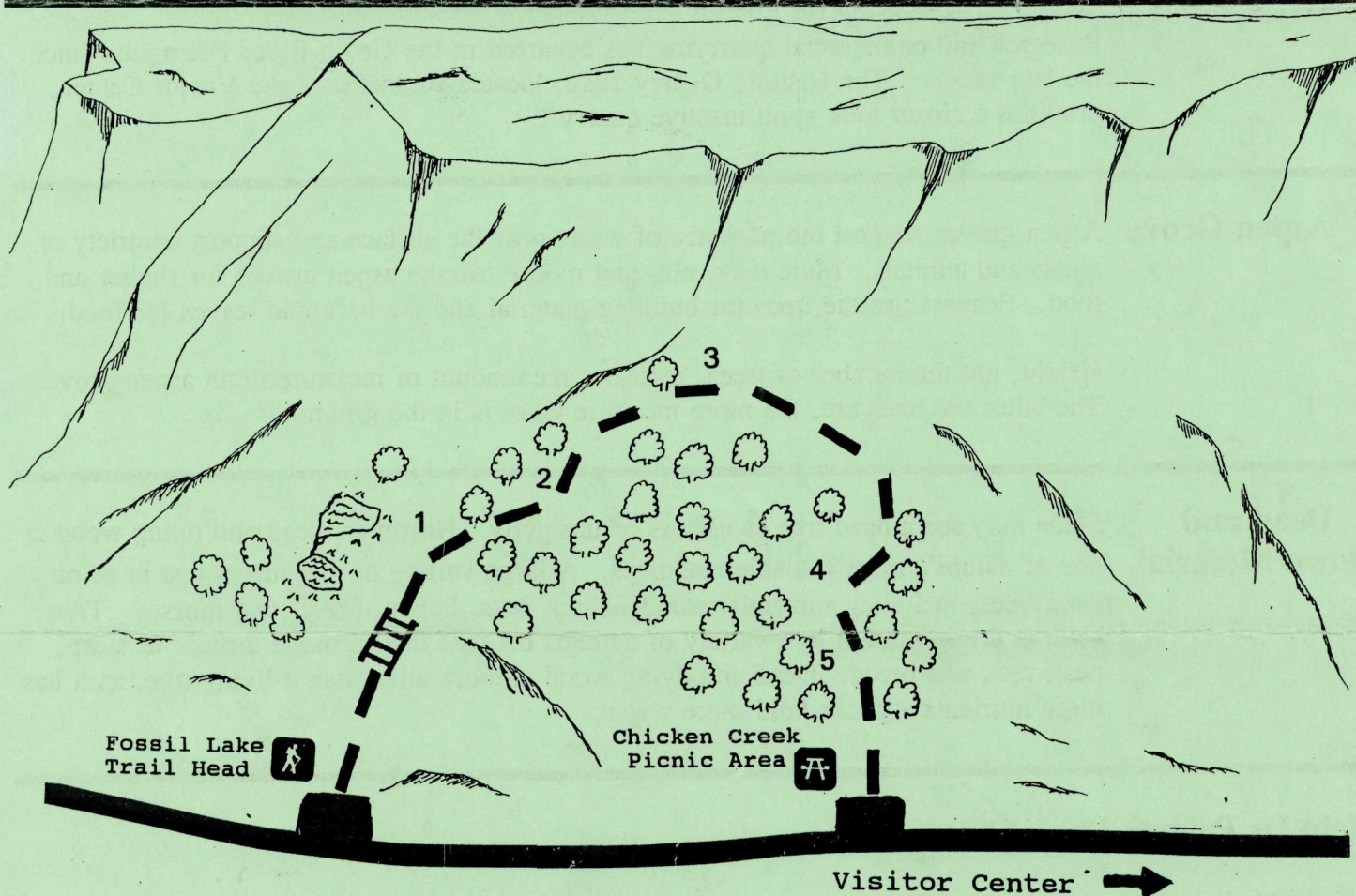
#### Hike the Trail

This 1-1/2 mile trail provides a view of the flora and fauna on the monument. It winds through an aspen grove, high desert landscape and near a beaver pond. Outcroppings above the trail are limestone lake sediments. Here, and throughout the monument, you are likely to notice sites where these sediments have been scientifically sampled. **Your assistance in not disturbing these fragile sites is important.**

**Fossil Lake Trail** leads to the bottom layers of this now dry lake bed. Snow and rain filter down through the limestone, where lenses of clay trap the moisture. The water is slowly released, creating outflows, or springs, that support the aspen groves.

Markers have been placed at five locations along the trail. The numbered sections in this guide correspond with the markers.

Comfortable shoes, drinking water, and insect repellent will add to a safe and pleasant hike. Check with a ranger for trail conditions.



#### 1 Beaver Pond

Beavers have been active in the aspen groves around you. Look carefully to see evidence of their presence. The beaver alters its environment more than any other animal except man. Beaver dams change the flow of springs and streams; create ponds that provide protection for the beavers, and habitat for various forms of life. These ponds also create an ideal ecosystem for plant growth. Beavers renew the environment of aspen groves by removing the older, larger trees and allowing the younger seedlings to regenerate.

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**2 High Desert** Although it may look sparse and unpopulated, the high desert ecosystem is abundant with plant and animal life. For plants and animals in this ecosystem, obtaining and retaining water is vital.

Sagebrush, the grayish-green plant that dominates the landscape, has several features that enable it to survive. Its leaves are narrow which reduce the surface area where evaporation can take place. The roots extend horizontally, like fingers, so that they can retain water on the surface and vertically (10-20 feet) to obtain ground water.

The tall green-leafed bush just in front of the marker is serviceberry. Its fruit provides food for mule deer, moose, and humans. Native Americans mixed serviceberries with fat and jerky to make "pemmican", which was stuffed into buffalo intestines and kept for the winter months. Today, people make preserves from serviceberry.

The large 6-8 inch holes, in the ground, are badger dens. Badgers feed on small mammals including the Uinta Ground Squirrel, mice, and other rodents. Once a badger abandons its den, a fox or jackrabbit may inhabit it.

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### **3 Green River Formation**

The tan to yellowish rock in front of you is part of the Green River Formation deposited as sediments in Fossil Lake 50 million years ago. At the time of its existence, Fossil Lake was at an elevation of about 5000 feet and approximately 50 miles long and 10 miles wide. Today, what remains of the lake bottom is approximately 7500 feet above sea level, the result of geologic uplift occurring 5-10 million years ago. Since then, wind and water have been at work carrying away the softer sediments leaving only remnants of Fossil Lake--like Fossil Butte and the ridge above you.



The rock layers are predominantly limestone, mudstone, volcanic ash, and dolomite, dispersed throughout the formation. Fossil fish are found in many layers of the Green River Formation. These include relatives of the herring family, paddle-fish, gar, bowfin, and stingray.

Research and commercial quarrying has occurred in the Green River Formation since the late 1800s. The Historic Quarry Trail, located southeast of the Visitor Center, provides a closer look at an inactive quarry.

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**4 Aspen Grove** Aspen groves suggest the presence of water near the surface and support a variety of plants and animals. Mule deer, elk, and moose use the aspen groves for shelter and food. Beavers use the trees for building material and the bark and leaves for food.

Height, not the number of trees, indicates the amount of moisture in an aspen grove. The taller the trees are, the more moisture there is in the ground.

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### **5 Dead and Down Material**

Some may see a dead tree as useless or unsightly. However, dead and dying wood is one of nature's most valuable resources. A large variety of organisms live in or on dead trees, including squirrels, woodpeckers, bats, lichen, fungi, and mosses. Tree cavities are important to a variety of animals because they provide a place to sleep, nest, rest, and breed. Dead and dying wood is more alive than a living tree, as it has more nutrients and can hold more water.

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## **Help Us Protect Fossil Butte**

All objects in the monument including rocks, fossils, artifacts, wildflowers and animals must be left in place and undisturbed so that others may enjoy them. This is not only the law, but is also a matter of good citizenship and consideration for others.

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