

## 10 BITTER APPLE

Bitter apple (*Peraphyllum ramosissimum*) is the vitamin of the forest. The small red fruits are a source of vitamin C. Humans as well as elk, deer, and birds all consume it for its nutritional properties. Raw, the fruits are nothing like a sweet apple, but cooked they make a delicious jam or jelly.



## 11 GRANARY

Look across the canyon, do you see your pantry? The rock structure built into the small alcove was built by Ancestral Puebloans, probably to store grains and corn. This and other archaeological evidence tells us that use of this area dates to about 50-1300 common era (CE). Hunter-gatherer societies became more stationary as they began to cultivate food in early agricultural societies. In 1300 CE, the Ancestral Puebloans migrated out of the area, but their descendants, the Zuni, Hopi, and Puebloan tribes all still live near and use the forest. **Remember, all artifacts are protected by law. Please take only pictures and leave only footprints.**

## 12 DEN TREE

Death is not the end of the story for many trees. This tree was killed by bark beetles, but it is now excellent habitat for wildlife. The hollows and other cavities from the insect damage are perfect homes--high off the forest floor and away from predators--for many species of birds, and small mammals.

## 13 BARBED WIRE FENCE

A fence type to match many desert plants. Thorny, barbed wire fences indicate use by European-American settlers. When the Forest was designated in 1907, it was split into parcels called grazing allotments. A barbed wire fence was built between each allotment, ensuring cattle stayed in their allotments and didn't stray into a different, perhaps greener pasture? These allotment boundaries are still used today to control livestock movement.

## 14 TRASH

So, why did you come to visit the forest today? Did you come to find food to survive like many of those who've passed here before? Probably not, but you are a part of the new users of the forest, recreationists. Evidence of your visit and those like you is being collected in this trash can. What story will your trash tell? What evidence will be left behind? The Manti-La Sal National Forest encourages you to enjoy your public lands, while packing out what you pack in and practicing Leave No Trace ethics. For more information visit [www.Int.org](http://www.Int.org).

## 15 ACCESS

Imagine traveling to this spot by foot or by horse. Your journey would be a bit different than by the car you drove to get here. Still though, you can enjoy a bit of the same journey, by exploring nature, while staying on trails, roads, respecting the boundaries of each campsite so that everyone may enjoy this campground. Please also follow campfire use and restrictions. Human use of this area will continue and it will change just as it has for thousands of years, but it is up to each of us to ensure the natural beauty and health of the forest remains for today and for tomorrow.

# PEOPLE

# AND

# NATURE

Self-Guided Interpretive Trail

For more information about the Manti-La Sal National Forest please call 435-587-2041



Manti-La Sal National Forest  
United States Department of Agriculture



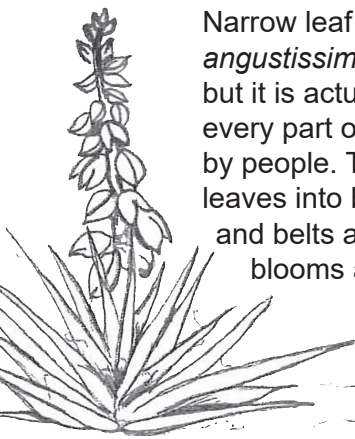
# WELCOME!

As you walk this 1/4 mile trail, you'll see evidence of how people have used the forest in the past. Do their reasons match your uses of the forest today? Match the numbered posts to the numbers in this guide to learn more about how people have connected to nature.

## 1 PINYON PINE

Ancestral Puebloan's diet included the seeds, or pine nuts, produced by pinyon or piñon pines (*Pinus edulis*). Have you eaten roasted pine nuts or pinyon flour? It's delicious, at least bark beetles think so. You might notice evidence of beetle damage and mortality across the southwest.

## 2 NARROW LEAF YUCCA



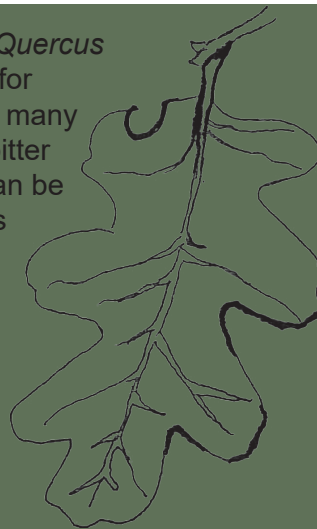
Narrow leaf yucca (*Yucca angustissima*) may look unfriendly, but it is actually a one stop shop; every part of the plant can be used by people. Tribes weave the fibrous leaves into baskets, sandals, rope, and belts and eat the stalks, blooms and buds. Even the roots can be made into yellow dye to color yarn, and even processed into soap.

## 3 PONDEROSA PINE

Need glue or waterproofing? Ponderosa pine (*Pinus ponderosa*) sap is just what you need! In addition to uses for the sap, tribes ground the seeds into flour. Give the tree's orange bark a sniff. The bark contains vanillin, which gives the tree its distinctive sweet butterscotch smell!

## 4 GAMBEL OAK

Acorns from Gambel oak (*Quercus gambelii*) are tasty snacks for wildlife and livestock. If too many acorns are eaten though, bitter chemicals called tannins can be deadly. To make the acorns edible to humans, tribes set baskets of acorns in running streams or boiling water to soak and remove the tannins. Once free of tannins, the acorns can be pounded into soap or ground into flour.



## 5 CAT FACE STUMP

This tree stump is a stumper! It was cut down by a human, but no commercial logging has occurred here. So who cut it and why? It may have been cut by one of the early pioneers to the area, who cut the lumber to build their house. Can you see the *cat face* at the based of the stump? This triangular tree scar is formed when a live tree is burnt during a wildfire. Although Ponderosa pines have thick bark which protects them from fire, sometimes a fire can burn through the bark to the interior wood. Just like if we're cut or burnt, a new layer of growth heals the edges of the tree's wound, but leaves behind a scar, called a *cat face*.

## 6 UTAH JUNIPER

How would you survive a drought? Utah junipers (*Juniperus osteosperma*) survive by killing off their own limbs! Juniper berries make gin, right? The blue fleshy modified cones, often mistaken for berries, are used to make gin, and tribes use them for medical purposes. Lastly, fence posts can also be made from the rot resistant wood.

## 7 LIGHTNING STRIKE

A lightning strike caused the long scar on this pine, leaving the tree vulnerable to insect damage and disease. Lightning was once the main cause of wildfire in the western United States. Commonly dead trees, known as snags, or dry duff and forest floor litter, would be struck material would ignite.

## 8 FOREST SUCCESSION

Over our lifespans we grow and change, often providing for new life to come behind us. A forest too goes through a life cycle of birth and death, providing life to other vegetation along the way. Wildfires are often seen as killing everything, but in fact, they are the start of life. Grasses, flowers and small shrubs sprout literally from the ashes, using the nutrients introduced into the soil from the fire as food. These first species, add more nutrients into the soil as well as stabilize the soil from erosion and shade the soil from the sun. This lets the second growth of larger shrubs and small trees to sprout. They'll eventually outgrow the first vegetation and will in turn be replaced by another succession of trees producing a mature forest. Finally, another wildfire returns the mature forest to soil nutrients and the cycle begins again. Climate change has altered the frequency of wildfires, reducing the forest's ability to maintain a healthy succession of vegetation.

## 9 BEETLE KILL

Bark beetles found this pinyon pine to be delicious! Warm temperatures used to only occur in summer, but climate change has extended the period of warmth. Beetles can now reproduce multiple times before winter frosts make them go dormant or killing them off.

