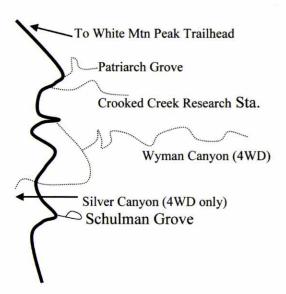
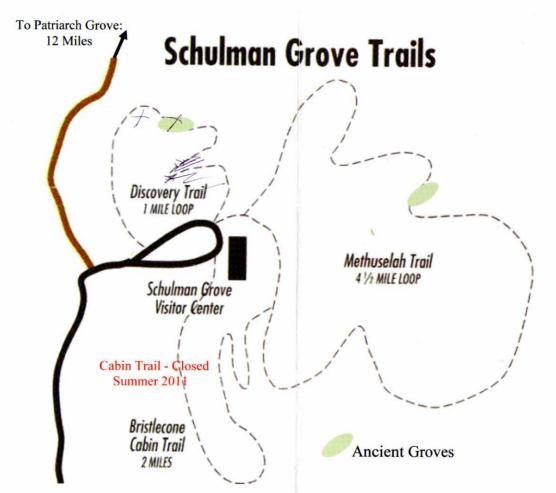
Understanding and appreciating the scientific and scenic value of this high altitude environment will help protect the ancient trees for future generations. Please observe the following regulations:

- All vehicles must remain on designated roads
- Collection of any wood within the bristlecone forest is strictly prohibited
- Campfires and overnight camping within the bristlecone forest are also prohibited
- 4. Please stay on the trails within the developed areas of Schulman and Patriarch Groves

During the period of construction of our new visitor center, please stay out of the fenced construction area and mind the caution signs.

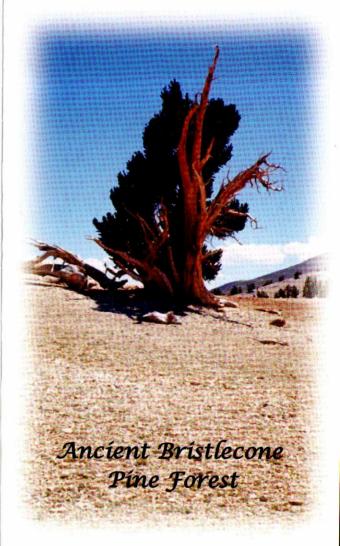




Hiking through the bristlecone forest is a wonderful way to explore and learn about the ancient trees. At Schulman Grove there are two hiking trails available for the 2011 season. The Discovery Trail is a short interpretive trail that loops from and back to the parking lot at Schulman Grove thorough a grove of three to four thousand year old trees. It is ¾ of a mile long with rest benches and interpretive trail panels along the route. The trail gains then loses about 300 feet in elevation and takes about 45 minutes to walk – suitable for kids too! Dogs are allowed on leash.

The Methuselah Trail is a 4 mile hike through an ancient bristlecone pine forest. The trail journeys past ancient trees, a mountain mahogany woodland and the magical Methuselah Grove. It is a is moderately strenuous hike with an 800 foot elevation loss then regain as the trail returns to the visitor center. Rest benches are available along the way so take your time, water, and a snack and enjoy your journey through the ancients. Be sure to have a hat with you as the sun can be quite debilitating at this elevation.

Welcome To The



US Forest Service Inyo National Forest Eastern Sierra Interpretive Assn





A Journey Through Time

Standing as ancient sentinels high atop the White Mountains of the Inyo National Forest, the Great Basin Bristlecone Pines (*Pinus longaeva*) rank as the oldest trees in the world, having achieved immense scientific, cultural and scenic importance.

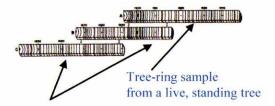


While the oldest trees are found in the mountains of eastern California, Great Basin Bristlecone Pines are widely scattered throughout the high mountain regions of Nevada and to a lesser extent, Utah. A close cousin, the Rocky Mountain Bristlecone Pine (*Pinus aristata*) is found in Colorado, New Mexico and in one isolated stand on the San Francisco Mountains of Arizona.

Every year, trees produce a new layer of wood just under the protective bark.

During periods of low precipitation or drought, the new layer of wood – known as a tree ring – may be narrow but in times of greater moisture the ring may be wider. This wide and narrow pattern of tree rings produces a very distinctive pattern which scientists

can use to study past climatic trends. Since the wood here in the cold, dry environment of the White Mountains decomposes very slowly, tree-ring patterns remain intact for thousands of years. By matching the overlapping patterns of live trees and dead wood this tree-ring pattern can be "extended back" continuously for thousands of years.



Tree-ring samples from dead wood; either as a standing tree or dead wood on the ground

Scientists can now piece together these long tree-ring samples into one long continuous chronology that provides a look back into climate patterns all the way back to the end of the last ice age, some 11,500 years ago!!



You may notice groves or pockets of bristlecones growing on outcrops of a white rocky soil. This is dolomite, a highly alkaline limestone in abundance in the White Mountains – hence the name!! It is not that the bristlecones need or "prefer" the dolomite, it's a matter of competition. These hearty trees have

adapted to this challenging soil condition and can survive and even thrive in it – while most other plant species cannot. This gives the bristlecones a competitive edge in germination which they need as they grow so slowly.

"Not In Spite of Adversity but Because of It!"
The key to the bristlecones longevity as they say is location, location, location! The harshest growing conditions produce trees that live the longest – they put on tiny amounts of resinous, hard wood and are tough enough to survive the drought conditions that would fatally weaken most other trees. The "best" growing conditions – good soil and adequate water – may produce tall, large bristlecone pines but they will not live to become one of the ancients.

The Trees that Re-wrote History

As improbable as it may seem, these ancient trees have also played a role in modern interpretation of western European history. For many years scientists and historians relied on a form of age dating known as radiocarbon dating. It was discovered back in the 1960's that this process was flawed and needed to be calibrated. Bristlecone pines to the rescue!!

The wood from these ancient trees provided precisely dated samples that were used to correct the process. This in turn caused a reevaluation of some of the dates assigned to prehistoric sites which caused a "re-ordering" or a new interpretation of cultural diffusion throughout the Mediterranean and European areas.

A New Day

In September of 2008 the log cabin style visitor center at Schulman Grove burned to the ground with a total loss of contents and structure. It was a tragic loss but the community responded with donations and pleas to re-build even before the site had cooled down!! Quick action by Forest Service officials and a bit of luck on timing secured the necessary funds to rebuild the facility, including new exhibits.

Construction began in early spring 2011 and all indications are that the building will be complete by late November. Finish work and exhibit installation will take place in the spring of 2012 with a community thank you and well-deserved grand opening ceremony to follow.



Future Bristlecone Pine Forest Visitor Center.

Visit the Inyo National Forest website at www.fs.usda.gov/inyo - select "Special Places," then "Bristlecone Pines-Full Story", then "Construction update-follow the progress" to stay up to date with the construction progress. View regular photo updates of the structure in each stage of development and watch for an announcement of the grand opening date — tentatively set for July 14th of 2012.