

WHEELER PEAK

# HIKES

Upper trail to Stella Lake: Leaving from the large parking area, near where the road crests the hill before the Wheeler Peak Campground, this one mile hike traverses pleasant meadows and forests. Fine views of Wheeler Peak are found along the way

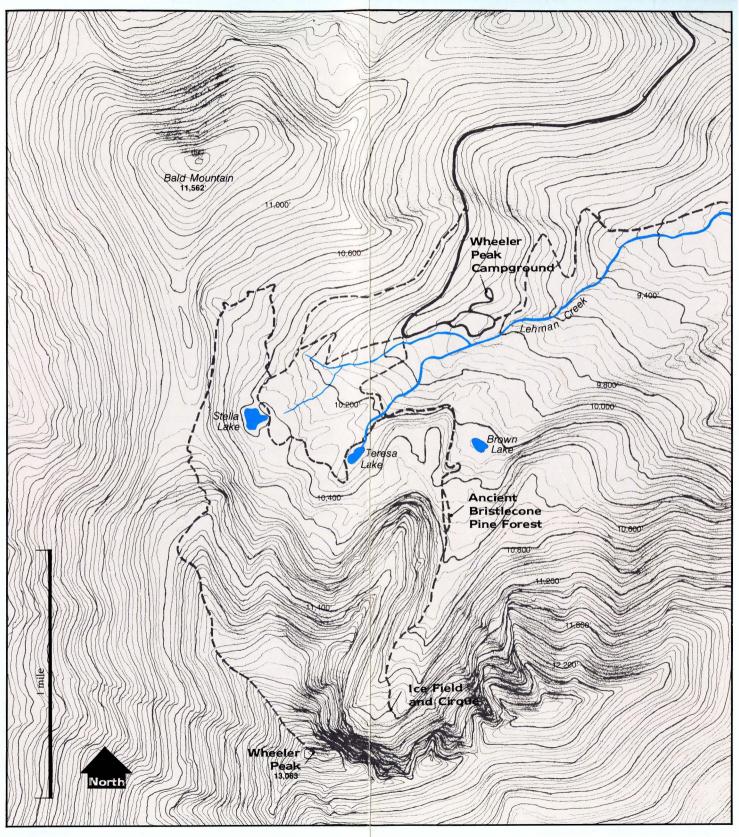
Loop trail to Teresa and Stella Lakes: Starting at the hiker's parking area at the Wheeler Peak Campground, this three mile loop passes both Stella and Teresa Lakes. The trail goes through deep forest and open meadows.

Wheeler Peak trail. The Wheeler Peak trail branches from near Stella Lake. The total one-way distance from the campground is five miles, with a climb of 3.000 feet.

Bristlecone pine forest and icefield trail. This trail branches from near Teresa Lake. The bristlecone pines are approximately one mile from Teresa Lake and the icefield is a mile beyond the bristlecones.

## **RULES**

- 1 Remember that all plants, animals, rocks and minerals are protected, including dead and down bristlecone pine wood. Leave it for others to enjoy
- 2. Please do not camp or build fires outside of the Wheeler Peak Campground. The alpine basin above the campground is too fragile and too close to the road to support backcountry use. Backcountry camping is permitted in the Baker Creek and Snake Creek drainages.
- 3. Pets are not permitted on trails. Wildlife viewing opportunities are more plentiful when pets are left behind.
- 4. Do not hike in exposed places when lightening threatens. Thunderstorms are possible during summer months.
- 5. Be prepared for cold and wet weather Although most summer days are pleasant and mild, cold and wet weather can occur any time of year and can be dangerous to those caught unprepared.



# BRISTLECONE FOREST

Bristlecone pines, found on high mountain ranges throughout the Great Basin, grow in a dramatic setting beneath Wheeler Peak. Normally found between 9,000 and 11,000 feet above sea level, bristlecone pines are timberline trees, and usually grow in areas that most people find difficult or impossible to reach. The grove found on the northeast flank of Wheeler Peak is relatively easy to visit, only requiring a two-mile hike. Usually the trail to the grove is free of snow from late June to early October.

Bristlecone pines in the Wheeler Peak grove are noted for their great age. How do scientists know how old a tree is? Trees in the grove have been dated by using an increment borer which removes

a small core from the tree but does not permanently harm it. Bristlecone pines greater than 3.500 years have been found, but the oldest tree in the world remains a bristlecone pine found in the White Mountains of California, a tree approximately 4,600 years old.

What makes these trees live so long? The question can be restated to: What takes these trees so long to die? Bristlecone pines can grow on both the inhospitable sites at timberline and more favorable sites at slightly lower elevations. It turns out that only trees growing on the harsh, rocky windy sites near timberline are capable of great age. Usually the timberline trees appear to be dying, with only part of the tree alive. Apparently the ability of bristlecone pines to cut back the amount of living crown in times of drought stress, without killing the entire tree, is a factor favoring their survival. In addition, because the trees grow so slowly under harsh conditions, the wood of bristlecone pines is hard, resinous and resistant to decay The dense wood produces smooth, sculpted surfaces when polished by wind-driven winter ice.

Bristlecone pines are not the only trees found in the grove. On the way to the grove, you will hike through a moist, relatively tall, Engelmann spruce and limber pine forest. Both of these trees grow with bristlecone pines on the harsh sites found on the quartzite moraine beneath Wheeler Peak. Like bristlecone pines, limber pines also have five needles per bundle and in both cases the clustered needles make the end of each branch look like a bottle brush. One way to tell the trees apart at a distance is to notice that each bristlecone pine branch looks like a new bottle brush while each limber pine branch looks like a used bottle brush.

Remember that all trails in the Wheeler Peak area are above 10.000 feet elevation. Take it easy and do not over exert yourself.

## WHEELER PEAK

At 13,063 feet above sea level. Wheeler Peak is the second highest peak in Nevada. Fortunately for park visitors, Wheeler Peak is relatively accessible. A five-mile trail leads past Stella Lake to the summit. Visitors attempting this trail should be in good physical condition and should allow six to ten hours for the round trip hike.

Wheeler Peak is composed of ancient quartzite. Scientists tell us that Wheeler Peak originated as a large deposit of sand, either as sand dunes on land or as an accumulation of sand on a sea floor The sand was subsequently compressed into sandstone. The sandstone, buried under extensive sediments, was later heated, compressed and metamorphosed into quartzite.

Wheeler Peak itself was uplifted approximately 13 to 25 million years ago. Extensive glacial carving during the past 3 million years produced the steep northfacing cirque, the moraines and the other glacial features found on Wheeler Peak.

Visitors climbing Wheeler Peak will find themselves passing through several plant communities. Both Engelmann spruce and limber pine are found at treeline on the trail to the summit. After getting above treeline, hikers have the pleasure of hiking through an alpine environment. Hikers should watch for phlox, primrose and other flowers.

### **ICEFIELD**

First mentioned by the U.S. Geological Survey in their 1883-1884 annual report, permanent ice under the face of Wheeler Peak remained forgotten until rediscovered in 1955. Investigators who visited the icefield in 1955 thought it showed many of the characteristics of a true glacier Features described included crevasses, a bergschrund (a crack in the ice parallel to the head wall of the glacier), and a developing moraine. Subsequent investigators were not sure that the ice beneath Wheeler Peak showed enough glacial characteristics to be classified as a true glacier The uncertainty remains today In either case, the area is unique because it is the only permanent ice found in the Great Basin.

Another unusual feature found beneath Wheeler Peak is a possible rock glacier Rock glaciers form when rocks overlie permanent ice, and the whole mass moves downhill. Located below the icefield, the possible rock glacier also requires further research to confirm its existence as a true rock glacier.

Hikers can get close to the icefield by continuing on the trail past the bristlecone pine grove. Hikers are cautioned not to venture past the warning sign at the end of the trail, as rocks are constantly falling from the face of Wheeler Peak, making travel on the ice extremely dangerous.

