



Fire Lookouts

Eldorado National Forest

Background

Fire suppression became a national priority around 1910, when the country was stricken by what has been considered the largest wildfire in US history. The Big Blowup fire as it was called, burned over 3,000,000 acres (12,000 km) in Washington, Idaho, and Montana.

After the Big Blowup, Fire Lookout towers were built across the country in hopes of preventing another “Blowup”. At this time lookouts were primarily found in tall trees with rickety ladders and platforms or on high peaks with canvas tents for shelters. This job was not for the faint of heart. This did little to offer long-term support for the much needed “Fire Watcher”, so by 1911 permanent cabins and cupolas were constructed on Mountain Ridges, Peaks, and tops. In California, between 1933 and 1942, Civilian Conservation Corps (CCC) crews reportedly built 250 fire lookout towers. These crews also helped build access roads for the construction of these towers.

Fire lookouts were at peak use from the 1930s through the 1950s. During World War II fire lookouts were assigned additional duties as Enemy Aircraft Spotters protecting the countries coastal lines and beaches. By the 1960s the Fire Lookouts were being used less frequently due to the rise in technology. Many lookouts were closed, or turned in to recreational facilities.

On the Eldorado ...

The Eldorado National Forest originally had 9 lookouts at the beginning of the century. These towers were strategically located on mountain peaks to maximize their viewing distance and range to cover the entire forest. Lookouts come in different designs based on the materials available at the time. The original lookouts were often made of wood versus the metal of today’s towers. A few hardy souls worked off of platforms high up in a tree on a mountaintop (see photo).

Today, fire cameras are also used for fire detection. Several fire cameras overlooking the Eldorado NF and the Lake Tahoe Basin can be monitored online at <http://www.alertwildfire.org/tahoe/firecams.html>. Feel free to check out the current views and conditions across the forest.



Plummer Lookout. Can you see the 2 people?



Big Hill

Maintained and staffed 7 days a week during fire season the Big Hill Lookout is located in the heart of the Crystal Basin Recreation Area just south of Union Valley Reservoir. Big Hill’s original 23’ tall tower with a 14’ x 14’ metal cabin was destroyed in the 1992 Cleveland Fire. In 1993, a new 14’ x 14’ cab with a catwalk and a cabin residence for the lookout next to the tower were built. The nearby helicopter air attack base survived the fire due to the courageous efforts of firefighters staying to protect the structures as the wildfire burned over.

USDA is an equal opportunity provider and employer.



The Job of the Lookout

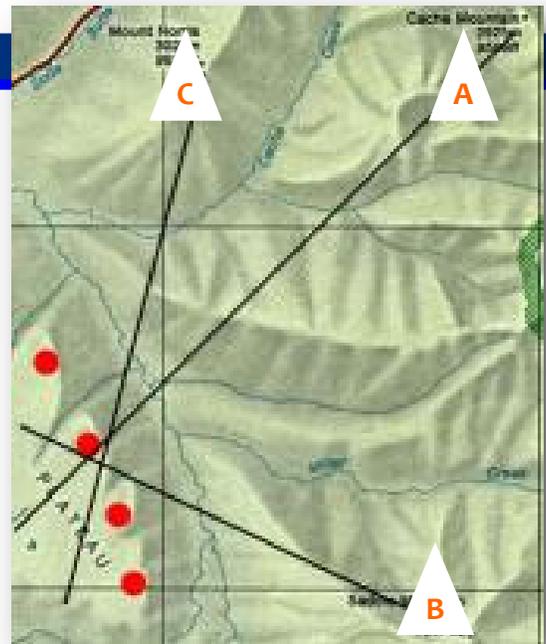
Finding fires while they are small is critical to effective fire management, making the lookout an important job to staff. In the old days fire lookouts not only kept an eye out and reported smokes but were often the first or the only resource available to go extinguish the fire. They would have to hike or ride miles to the fire with only a shovel to fight the wildfires.

Fire lookouts are responsible for observing and reporting smoke or fires in their assigned areas. Knowledgeable about weather systems, fire weather, and fire behavior, lookouts utilize a variety of tools to get the job done; such as, binoculars, topographic maps, compasses, and the Osborne Firefinder to identify the approximate location, size, and characteristics of smokes and fires. Lookouts also use thermometers, anemometers, and other simple weather instruments to record and report daily temperature, wind speed, wind direction, and other weather conditions. Using two-way radios or cell phones lookouts communicate with field staff, dispatchers and fellow lookouts about weather, fire hazard conditions, fire emergencies, accidents and updates of wildland firefighting activities. The lookouts enjoy talking with visitors about the forest and fire prevention.



The Osborne Fire Finder

The Osborne fire finder was invented in 1911 by William B. Osborne and commercially produced in 1913 by Leupold-Volpel & Co. Although between 1914 –1933 Osborne made many modifications to his “Fire finder”, it was in 1934, that he radically changed the sighting assembly to include two sets of cross threads of horse hair and vertical scales of “+” and “-”, so accurate vertical readings could be made on fires above and below a lookout’s elevation. To date the 1934 model is still widely used by most fire lookouts and considered to still be the best tool for the job.



Triangulation

Triangulation is the process of pinpointing the location of a smoke or fire by taking bearings of it from two or three remote points. A ranger at **Tower A** would see smoke in the distance and take a bearing to it on his firefinder. This single line is not enough information to locate the fire because it could be anywhere along that line, close or many miles away. The ranger would radio **Tower B** and tell him the general direction of the fire. **Tower B** would then find the fire from his viewpoint and take a bearing. Where the two bearings crossed would pinpoint the fire and firefighters could be efficiently dispatched to put it out. Another cross from **Tower C** dials the location in even better.



COOL FACT: Daisy Veerkamp was the first female lookout or “Lady Fire Watcher” on the Eldorado National Forest. Mrs. Veerkamp and her family lived and staffed the Robbs Peak Lookout tower for two seasons from 1915-1917.