

Fire Condition Summary

The vegetation in the Unit has been modified since the introduction of non-native settlers. Early survey reports and settler communications indicate that both the oak woodland and timberlands were more open. Ladder fuels were limited probably because of low intensity natural and Native American caused fires. Historical information indicates that major fuel modification occurred within the Unit because of mining, logging, and farming.

By the 1870's large damaging fires occurred, not just within the Unit but also throughout the United States. The most documented of these fires are those that occurred in the Great Lakes region. The Peshtigo fire claimed 1300 lives and burned over 1,100,000 acres and an unnamed fire in Michigan burned an estimated 1,200,000 acres and killed over 200 people. The Great Lakes region's fuels had been heavily modified and hundreds of fires starting in slash destroyed millions of acres and killed over 2000 people¹⁸¹⁹.

An excerpt from "The Marinette and Peshtigo Eagle" printed Saturday October 14, 1871 gives one key to wildfire survival.

"The whole country is scene of devastation and ruin that no language can paint or tongue describe. There is only one family of any note in the entire bush that has escaped. This is the fine farm of Mr. Abram Place in the upper bush. He having an immense clearing and protected also by the roads was enabled to save his house, barn and nearly all of his stock and supplies. His house has been an asylum for the suffering ones of that region, and he has rendered them all the assistance in his power."

One of the results of the 1870 fires was a national effort to control unwanted vegetation fires. The 1905 USFS Handbook states "Every ranger or guard must go to and fight every fire he sees or hears of at once, unless he clearly can not reach it, or is already fighting another fire..."²⁰ By the early 1900's efforts were made within the Unit to control all unwanted fires.

As vegetation reclaimed the modified or denuded lands all fires were extinguished which helped promote today's fuel loading. In addition, fuel types such as brush and timber require sufficient dead fuel or sufficiently low live fuel moisture in order to burn. Many areas with this type of fuel have not burnt because the proper burning conditions were not met.

Now many of the open woodlands of the valley floor and foothills of the Shasta – Trinity Unit are congested with decadent brush fields. A tightly closed canopy has replaced the timberland's openness and contains sufficient ladder fuels to create a tinderbox. Most of the land within the Unit, where large fires have occurred in the last 100 years, has also been reclaimed by impenetrable brush and forest. Lands burned as recently as thirty years ago have returned to the flammable conditions that existed the day of the fire.

The exceptions to this are those lands where the landowner, private or governmental, has made a concerted effort to thin the regenerating vegetation via manual or mechanical fuel removal or by the use of prescribed burning. **This thinning and maintenance can be the impetus to break the cycle of large and devastating fires within the Unit.**

¹⁸ "The Great fires of 1871 in the Northwest" I.A. Lapham <http://www.library.wisc.edu/etext/WIReader/WER0133.html>

¹⁹ History & Ecology of Fire in Michigan" http://www.michigan.gov/dnr/0,1607,7-153-10367_11851-24038--,00.html

²⁰ 1905 USFS Handbook pg.68 (www.lib.duke.edu/forest/usfscoll/publications/1905_Use_Book)

Vegetation within the boundary of the 1972 Swasey Fire.



These Swasey Drive fuels are again a fuel model 4 below a young pine and oak canopy. A fire burning in these fuels will likely destroy all of the vegetation including the grey pines and oaks.



1992 Fountain Fire Reforestation.

This is a single age plantation with some hardwood in the drainage. This particular section has received some thinning. The entire plantation will require subsequent maintenance to protect it from fire. As maintenance continues this will return to a healthy forest. Areas of this fire not maintained have already aged into a hazardous condition.