



## Sierra Forests Threatened, Present Conditions



*In the March 1 issue of the Chester Progressive was an article by Steve Wathen, Staff Writer, entitled "Sierra forest threatened". The article summarized the presentations of three local Forest Service experts given as part of the Feather River College Sustainability Series at the West End Theatre on February 15, 2017. Our Firewise Committee member, Carlos España, did not attend the presentations but thought that paraphrasing some of Steve Wathen's reporting would be of interest to LACC members.*

*Please read what experts from the Forest Service had to say about the conditions in our local forests and the threats that exist from those conditions. Keep in mind that Mr. Wathen's statements were not verified with the Forest Service personnel quoted.*

*Barbara MacArthur, Firewise Chairperson (v. FireNews17\_6)*

### Historic Ideas versus Recent Scientific Findings

When the first European Americans saw the magnificent trees of California, they assumed that if they could just stop fires, the trees could grow bigger. After major U.S. firestorms in the 1800's, it was decided that forest fires shouldn't be allowed to burn. This story relayed by Ryan Thompson, chief silviculturist with Plumas National Forest, now conflicts with scientific knowledge that trees compete for water and light. If there are too many trees, none of them get big. And without low intensity fires being allowed, more trees grow and heavy fuel loads (ground materials and weakened trees) increase.

### Present Conditions in Plumas County Forests

Two thirds of forest stands in Plumas County have not burned in 100 years. This means fuel loads are heavy. These conditions do not make for a healthy forest. Droughts further weaken overcrowded trees, making them more susceptible to diseases, insects, and fire. When a high intensity fire occurs in such conditions, it can be catastrophic making the forests less diverse, more ecologically unstable, and if repeated, can sterilize soils, making them more erodible and unable to regenerate on their own.

Danny Cluck, a leading forest entomologist with the Forest Service says the "forests are out of whack". He says bark beetles are a normal part of a forest, but they are usually found in small numbers. During long droughts they attack weak trees, and spread rapidly where tree densities have increased. With so much more fuel from diseased, dead, and dying trees in the under-stories of overcrowded forests, fires become hotter and burn higher up into the crowns of mature trees, spreading rapidly from crown to crown. Instead of just clearing small trees and surface fuels, catastrophic fires burn nearly all trees, including old ones that have survived past low intensity fires.

Kyle Merriam, forest ecologist for the Sierra Cascade Province, spoke about the trend of average yearly temperatures having risen 2 to 2.5 degrees since 1895. Small temperature changes make a big impact on the health of forests. Our region use to have 8 months of freezing temperatures; now it is about 5 months. And less of our precipitation occurs as snow. Less snow means less soil moisture during the growing season and through the summer, and higher air temperatures and less groundwater. Additionally, spring is coming about 2 weeks earlier. Fuels are drying out sooner making the fire season almost 3 months longer than in the 1960's. Consequentially, forests are experiencing more fires, more severe fires, and much larger fires than normal.

### What Can Be Done to Address Such Conditions?

The experts in Steve Wathen's article were not asked to speak on what can be done under present conditions. However, we have many Federal and State agencies who have organized their fire prevention departments to plan for fighting wildland fires to protect our communities. And these agencies have prepared documents on best practices for preparing individuals, communities, and counties that can be used to help establish their own plans for fire protection. Many of these best practices have been summarized in past LACC Newsletters for the awareness and education of members. [LACC Firewise Info](#)

But what happens when individuals and communities do their best to incorporate fire protection practices, but the community next door does not. **In our next Newsletter issue**, we will discuss the concept of planning on a "Landscape Scale" basis to coordinate efforts across large landowner boundaries.

**Source:** Steve Wathen, Chester Progressive, 3/1/17