



Fire Ecology

Vegetation is constantly growing and changing. Historically, vegetation was dependent on the checks and balances of lightning ignited fires. Human ignitions also shaped the way we viewed the environment. These fires reduced fuel accumulations and maintained vegetation structure. However, settlement, fire suppression and changes in land uses resulted in fewer fires altering the vegetation structure. Fire is a natural process and a critical component in nutrient cycling and maintenance of ecosystems and can be used as a tool in restoring forested and non-forested areas. The ecological effects of fire are an essential part of many ecosystems.



Figure 1. Pre-burn Ponderosa Pine Forest

Figure 2. Post-burn (same view as figure 1)

Figure 3. One year later (same view as figure 1)



Figure 4. Pre-burn Ponderosa Pine Forest

Figure 5. Post-burn (same view as figure 4)

Figure 6. One year later (same view as figure 4)

Using prescribed fire may be an important step in restoring the natural range of variability and lead to self-sustaining vegetation communities. A significant part of this process is monitoring the effects of fire, which helps fire managers to understand these complex ecosystem functions. "One of the primary and unique missions of the National Park Service is to perpetuate natural ecosystems in a state approximating the pristine." (Stone 1965, Houston 1971).