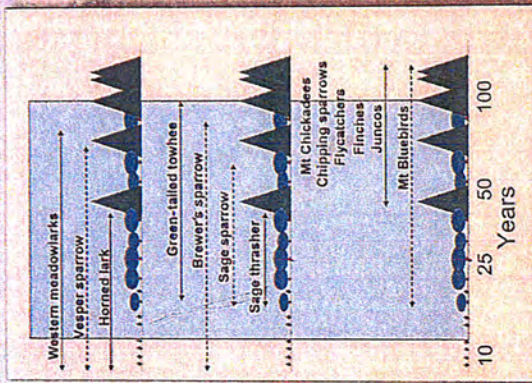


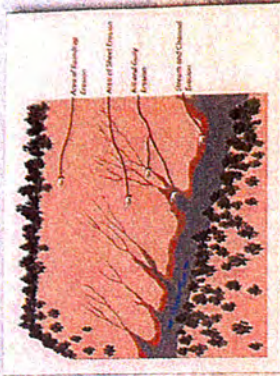
## Too Much of a Good Thing

Without fire, long-lived juniper gains a competitive edge over its plant neighbors. It slowly tops species such as sagebrush and rabbitbrush and crowds out stands of aspen. More critically, an average juniper tree guzzles between 40 to 60 gallons of water each day! It spreads its roots deep and wide, sucking up all available moisture and leaving other vegetation high and dry! Given time, only juniper remains.

As a complex plant community transforms into a juniper monoculture, the diversity of wildlife also declines. Loss of diversity negatively impacts the ecosystem by reducing available grasses and forage. It also impacts ranching which is important to the local economy and social fabric of the area.



Bird use through the phases of juniper succession from grasslands through shrub-steppe to juniper woodland. The total number of birds and largest diversity of bird species use Phase I and Phase II woodlands. Dashed lines in the graph depict declining use by bird species.



Runoff and erosion increase as grass stands decrease.



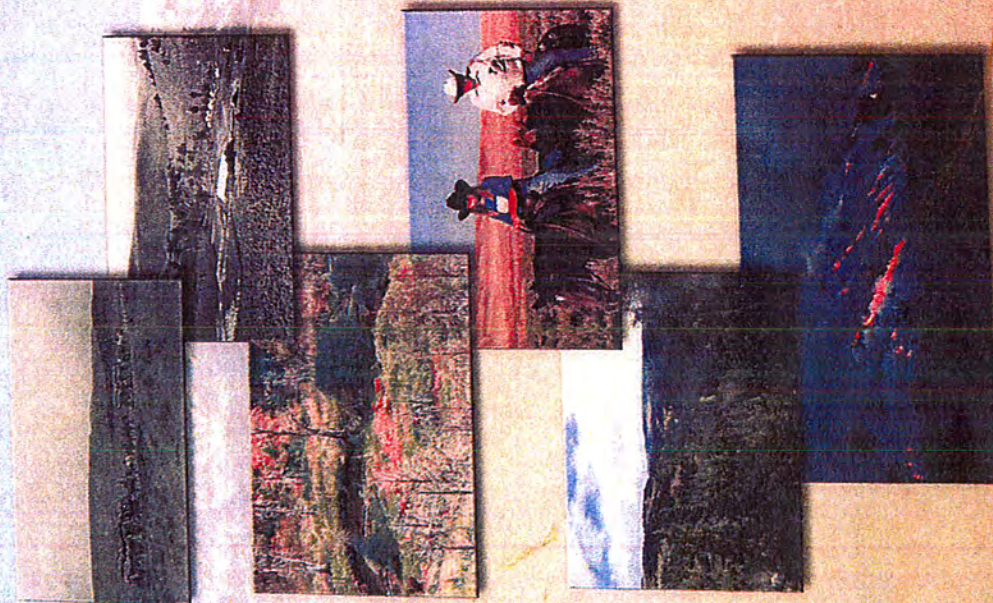
To learn how the BLM and its partners are studying methods to control the spread of western juniper, visit the demonstration plots one mile up the road.

Walk the 1/2-mile trail to acquaint yourself with common high desert plants and observe first-hand how a lack of fire has tipped the ecological balance of this landscape. The brochure will guide you in your explorations.



# A Century Without Fire

The high desert ecosystems historically depended on wildfire. Periodic blazes kept the slow-growing juniper seedlings in check, allowing sagebrush and aspen to dominate their respective habitats. Shrubs, grasses, and wildflowers created a varied understory which, in turn, supported a rich mix of mammals and birds. Active fire suppression came hand-in-hand with the settlement of Oregon and removed the role of wildfire that kept juniper in check. Homes, fields, and livestock herds required protection. After more than 100 years, the effects on the landscape are now dramatic and obvious.



# An Invasion of Native Plants



This is an example of an old growth western juniper (*Juniperus occidentalis*), native to Eastern Oregon.



Since 1850, more than nine million acres across Eastern Oregon have been converted to low elevation juniper forests. These photos show the change in only 35 years.

In recent decades, juniper has spread explosively across the landscape, converting open sage-steppe ecosystems into dense thickets of juniper woodland.

This gnarled, aromatic tree is native to the ecosystem. However, since 1850 and the use of fire suppression, more than nine million acres have gradually become low elevation juniper forest.



Photo Credits: (Miller et al. 2000)