

Nevada Forest Health Highlights 2016



The Forest Resource

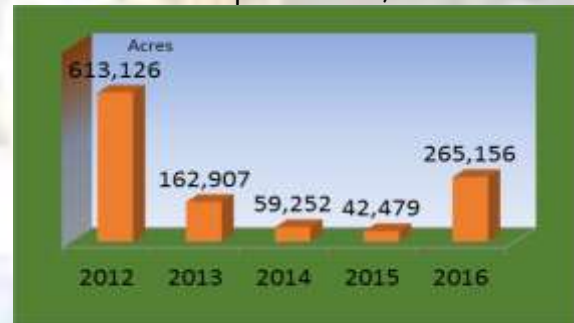
Nevada is unique in its forested component among the western states. The state is characterized by some 300 forested mountain "islands" separated by wide non-forested basins. Eighty-six percent of the state is non-

forest and about 83 % of the land is federally owned. Though the area of forest land is relatively small, the value of this resource is immeasurable in terms of commodities, recreational uses, and aesthetic properties. Healthy wildland and urban forests provide multiple benefits for Nevada's diverse population. Although little of Nevada's 11.1* million acres of forestland produces commercial timber, it does provide other wood products, watershed protection, wildlife habitat and recreation opportunities. Together with the urban forests in the state's communities, Nevada's forests are a critical resource in this sparsely forested state.

The majority of the forested lands are publicly owned (92%). Approximately 866,989 acres of forest land are in state and private ownership (using SW Regap data with the BLM 2007 land status layer data). From a statewide perspective, the majority (76%) of Nevada's forests are composed of pinyon and/or juniper species. Other forest types are restricted to the riparian areas and higher elevations in the state's 314 mountain ranges. Detailed information is available from the [Interior West FIA](#).

Components of Change

Nevada's forests are host to several common pests which plague Western forests. Widespread stress to the trees - brought on by drought conditions - weakened individual trees creating favorable conditions for the pests. **Wildfire** is a major change component for Nevada's forest and rangelands. The year 2016 saw a larger acreage burned from the previous past two years. Approximately 265,156 acres were burned in 2016 as compared to 42,479 acres in 2015.



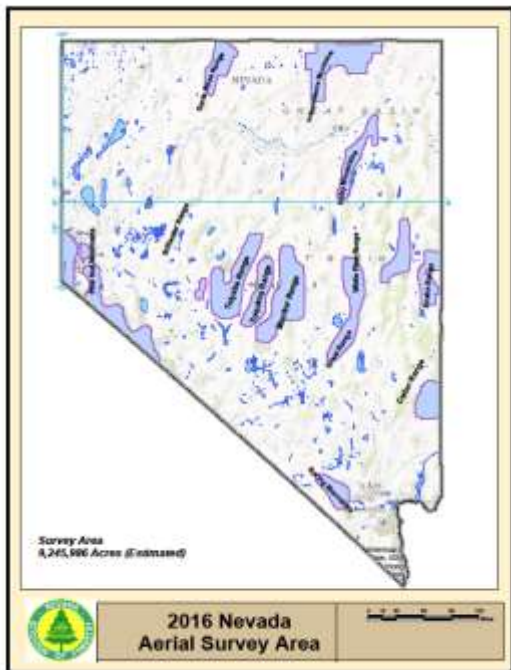
Forest Health Issues

In 2016, most of the estimates of mortality caused by insect outbreaks have continued to decrease significantly from 2015 levels. This occurred even with the ongoing drought in Nevada. Acreage affected across the state continues to decrease. Pinyon engraver beetle caused the most damage statewide affecting 1,632 acres. Mountain Pine Beetle continues to be a problem but no major outbreaks were recorded. Damage from Mountain beetle was only recorded on 995 acres. Jeffrey Pine beetle damaged increased to 686 acres, and mainly found to be a problem on the Nevada side of Lake Tahoe. Fir Engraver and western pine beetle damage were both recorded in 2016 and only affected 431 acres, and 68 acres respectively. Aspen stands statewide were affected with increased amounts of Aspen decline and Dieback for a total of 3,434 acres. This was caused by the lingering effects of Aspen

Leaf Spot from 2016. Dieback has been detected by aerial surveys in the west since 2003 and is caused by several agents including drought stress, insects, diseases, fire exclusion, and grazing by animals.

Anticipated Drought damage did not really show last year during aerial surveys. The most drought stress observed was located in cities and towns that were definitely cutting back on allowable watering of urban trees. Excellent precipitation during the winter of 2016-2017 has removed all of Nevada from drought and forested lands will be monitored to see how they respond this year.

White Satin Moth is being detected throughout Nevada but the impact still seems to be minor. Damage was located in Carson, Douglas, Elko, and Washoe Counties. Aerial surveys detected only 72 acres statewide. Insect populations in areas previously identified as heavily infested were are still present and causing minor damage. Natural predators such as wasps and ants have found the moths on their larval stage and have been actively feeding on this new food source. This in turn may be causing the population, and levels of infestation and damage to decline. This insect will be monitored in 2017.



The following map shows the extent of aerial surveys conducted in 2016.

Forest Health Project Highlights

The Nevada Division of Forestry has been very active statewide in 2016, preparing and implementing forest health projects on both private and state park lands

In Nevada. An ongoing 35 acre project in Big Bend State Park along the Colorado River is nearly complete, focusing on salt cedar removal and eradication and restoring the site to native mesquite trees. Campgrounds are also being treated to have salt cedar removed, and replanted to native tree and plant species to improve the condition of the park.

Projects completed using Western Bark Beetle Grant funds were completed on 17 private landowners, state and county parks and which completed restoration work on 266 acres. Projects varied in size and treated multiple insect in disease problems ranging from bark beetle control and removal of damage trees, dwarf mistletoe removal, pinyon engraver management, salt cedar eradication, and thinning to improve species composition and tree stocking levels. Tree planting of native hardwoods and conifers affected by wildfire and drought. Monitoring projects are being designed for planting restoration projects to monitor native plant growth and planted native tree survival.



Ponderosa Pine Planting - Beaver Dam State Park, NV



Aspen Restoration & Hazard Tree Pruning
City of Sparks, NV

The Nevada Division of forestry has worked cooperatively with the City of Sparks Nevada, and Washoe county Parks & Recreation on planning and implementing projects of urban parks and dispersed recreation areas. These projects involved hazard tree removal, thinning maintenance of overstocked area, pruning for insect, disease and wind damage, and a juniper mistletoe reduction project. These two projects are ongoing and will treat 67 acres.

In 2010, the USFS provided grant funding to the Nevada Division of Forestry to develop an education and implementation program to the citizens of Nevada on identifying the invasive bark beetles that they may encounter in their urban environments. In 2016 the NDF Forest Health Specialist investigated numerous possible invasive bark beetle sightings. As of this time the site visits did not find any evidence of invasive species being present. The Nevada Division of Forestry continues the cooperative effort with the Nevada Department of Agriculture in trapping and monitoring for both native and invasive species. This positive working relationship allows both agencies to coordinate and expand their efforts to quickly identify and manage for these invasive species, if positively identified within Nevada. In 2016 Emerald Ash Borer, European & Asian Gypsy Moth, Walnut Twig Beetle, Asian Longhorned Beetle, Banded Elm Bark Beetle and Sirex Woodwasp were all part of this program. No positive trap results were identified in 2016. Mediterranean Pine Engraver has been positively identified within and around Las Vegas. This is the first positive ID outside the state of California. It has been found in single leaf pinyon and non-native Aleppo pine which is a widely planted shade tree. The extent and damage from the beetle will be closely monitored and any management guidelines or treatments will be coordinated with the Nevada Department of Agriculture.

CITIZEN MONITORING FOR URBAN FOREST HEALTH

Tree Invaders ... They're BAD!

IF YOU HAVE A TREE IN YOUR YARD, YOU ARE PART OF THE URBAN FOREST.

WHY WORRY? TREE INVADERS...

- ✓ Reduce property values
- ✓ Destroy shade
- ✓ Kill trees, causing a fire hazard
- ✓ Create heat islands
- ✓ Ruin curb appeal
- ✓ Cause hazards when dying and dead trees break or fall
- ✓ Destroy the beauty of your landscape

HOW TO BE A CITIZEN MONITOR: Watch out for these invaders

IF YOU SEE THEM, CALL
 Jeff Wright, Area Entomologist
 775.365.6947
 Call Nathan, NDF Forest Health Specialist
 775.864.2832
FOR MORE INFORMATION, CALL
 Melissa Smith
 775.867.5222

WHAT CAN YOU DO?

- ✓ Don't move firewood
- ✓ Be extra eyes on the lookout for invasive insects
- ✓ Be aware of which trees could be victims

Logos at the bottom: IN (Interagency Network), USFS (United States Forest Service), NDF (Nevada Division of Forestry), and Nevada Department of AGRICULTURE.

For More Information:

[Forest Health Protection](#)

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