## Restoring the Sagebrush Sea

Private landowners in the Warner Mountains teamed up with the USDA Natural Resources Conservation Service (NRCS), the Bureau of Land Management, and other state and local partners to remove young juniper trees from historic shrublands with hand-held chainsaws while leaving old-growth woodlands alone. Together, these groups worked hand-in-hand to restore 53-square miles of sagebrush country and provide new scientific findings on how conifer removal benefits wildlife.



OREGON Warner Mountains, Oregon The organizations that are involved with this project include: Ranchers, Bureau of Land Management, USDA Natural Resources Conservation Service, Working Lands for Wildlife, Oregon State University, University of Idaho, Oregon Department of Fish and Wildlife, NRCS Conservation Effects Assessment Project, Lakeview Soil and Water Conservation District

## **KEY PROJECT STATS**



Rancher John O'Keeffe and his neighbors worked handin-hand with public partners to restore 53-square miles of sagebrush country.



Native plants rebounded quickly, providing more forage for livestock, and boosted the amount of water available.



Scientists found that sagebrush songbird abundance doubled, and the amount of highquality habitat for sage grouse increased six-fold (reference).



Within three years, scientists documented that a third of marked birds nested in restored sagebrush habitat. In addition, those nests were 19% more successful than the birds' nests before trees were cut.



Research found sage grouse populations grew at a rate that was 12 percent higher where trees were cut versus areas where no trees were removed (reference).

## **PROJECT SUMMARY**

In the past 20 years, more than one million acres of sagebrush in the Great Basin have turned into conifer forests. As trees become thicker, they siphon precious water from streams; fuel hotter, more severe wildfires; and replace native plants that feed livestock.

Beginning in 2010, private landowners like John O'Keeffe teamed up with the USDA's Natural Resources Conservation Service, the Bureau of Land Management, and other state and local partners to reclaim sagebrush range in the Warner Mountains.

Leaving the old-growth woodlands alone, partners focused their restoration work on recently invaded areas that still retained sagebrush and other native plants. Using chainsaws, they removed young trees, allowing native plants to rebound quickly. Overall, the effort restored 53-square miles of sagebrush country across property boundaries.

## **KEY PROJECT BENEFIT**

The partners wanted to monitor the impact of tree removal on rangeland health. Native plants rebounded quickly, providing more forage for livestock. Juniper removal also paid off by boosting water availability, especially helpful dry years.

Partners also paid special attention to how sage grouse populations fared. The amount of high-quality sage grouse habitat increased six-fold after juniper removal. Other wildlife benefited too. For example, researchers found the abundance of sagebrush songbirds doubled soon after conifer removal.And now ranchers are breathing easier too, with more space and better forage for grazing cattle.



























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