



United States Department of Agriculture
Natural Resources Conservation Service

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SAGE-GROUSE INITIATIVE

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— Buck Parks
Lassen County Rancher



Fallen Juniper trees ready for removal and chipping.

SGI is a win-win solution for ranchers and for sage-grouse. Healthy rangelands that include habitat for sage-grouse and other wildlife will help ensure the viability of western ranching and preserve a rural way of life in the West.

For more information, go to www.nrcs.usda.gov and search “SGI.” or contact your local NRCS office.

Juniper Removal Benefits Ranchers and Sage-Grouse

Twenty-one California ranchers in Lassen and Modoc Counties are among those in eleven states participating in a novel private-federal initiative to restore habitat for the imperiled sage-grouse. Protecting and improving habitat for sage-grouse is important because the bird is currently listed as a candidate for the endangered species list. If the sage-grouse is listed, it will dramatically impact ranching as we know it in the West.



Cowboys hand cutting juniper at a ranch near Susanville in Lassen County.

The Natural Resources Conservation Service (NRCS) launched the Sage-Grouse Initiative (SGI) in 2010 as an effort to simultaneously improve habitat for sage-grouse and improve sustainability and productivity of their native rangelands. Several large-scale threats facing sage-grouse also affect the sustainability and productivity of grazing lands. One of these threats is the encroachment of junipers.

“Past management practices, especially fire suppression, have enabled these conifers to encroach into sagebrush communities, reducing habitat for both sage-grouse and domestic livestock,” says Heidi Ramsey, NRCS range management specialist in Susanville. “This has become a costly problem for California ranchers in the SGI areas, so it’s not surprising that juniper removal has been one of the most popular SGI practices and is a part of almost all of our SGI conservation plans.”

“Juniper is invasive and noxious,” says Darrell Wood of Wood Ranches. We were looking for partners to help with the cost of removal. “We’ve participated in NRCS programs for over 20 years. So when I heard about the Sage-Grouse Initiative here, I was the first one to sign up.”

Wood is currently participating in two SGI Juniper treatment projects on a total of 760 acres in Lassen County. He says that improvements for sage-grouse habitat and rangeland for cattle go hand in hand.

“We’d been looking for multiple ways of increasing spring flows for riparian management as well as increasing beneficial vegetation – not only sage brush but also forbs and grasses for feed for cattle and wildlife,” Wood explains. “We’re pretty excited about the groundwater increases we’ve seen so far. We’ve already seen a significant increase in spring flows.”

“Juniper water use is estimated to be as high as 60 gallons for one tree per day,” says Ramsey. “When juniper is removed across hundreds or thousands of acres, you can only imagine the huge volume of water that is released into the soil profile for other plants to use. Forbs and grasses have much shallower rooting systems than juniper trees. With juniper removed, these native Sagebrush Steppe plants can once again use water closer to the surface to complete their life-cycles and in turn, offer life-giving nutrients and much-needed cover for sage-grouse and other animals alike.”

Buck Parks of Parks Ranch is another SGI participant who advocates the benefits of juniper removal. He and his family have been involved in treating close to 5,000 acres of western juniper on both public and private land.

“There are several reasons why removal of western juniper from sage-grouse habitat is very important,” Parks says. “The western juniper has over the last one hundred years turned what was once open space into, for lack of a better term, brush patches. The idea of the sage-grouse being listed prompted my family to take a proactive approach in dealing with the juniper issue because we felt that aggressive steps had to be taken to improve the conditions for the sage-grouse and a ‘hands off’ attitude would not work.”

Parks says that removal of juniper returns these areas to open space and makes survival of sage-grouse and many other species more likely. “There is an increase in plant and forage production and variety. Dense stands of juniper create a mono-culture that very few species of wildlife or livestock get any good out of. We’ve seen plants and forage improve in the sites where we’ve removed juniper, and the ecosystem as a whole begins to improve.”

Parks notes that when juniper is removed, livestock grazing and distribution become much easier to manage and both the livestock and the sage-grouse do better. It also makes a more difficult environment for predators.

“Fewer raptor perches and more open country will ultimately help sage-grouse,” he says.

Clearing junipers can cost from \$80 to \$250 per acre, depending on tree density. “The cost of removing the juniper is always a big issue,” says Parks. “With input costs on the rise, is it very important that people understand the long term benefits of juniper removal and understand that cost sharing to get this work done is vital to the success of achieving those benefits.”

Some SGI participants are chipping juniper for use as biofuel to produce electric power. This led to a welcome additional benefit during last summer’s wildfire season, when fire damaged PG&E power transmission lines in the Feather River Canyon and caused recurring power outages. To turn the lights back on in Susanville, the local utility district switched to the nearby Honey Lake Power biomass and geothermal plant. This provided 30 megawatts of electricity, nearly half generated from juniper chips removed as part of the Sage-Grouse Initiative.

“Our office would not have been open if it weren’t for the juniper chips,” says Ceci Dale-Cesmat, NRCS district conservationist in Susanville. “The ranchers and our partners in the Sage-Grouse Initiative have been very excited about the progress we’re making with the juniper treatments. But I didn’t foresee the junipers literally keeping the lights on. This is definitely a win-win.”



Juniper removal and chipping at a ranch participating in the SGI near Susanville, Calif. Some of the juniper chips are used by Honey Lake Power as fuel to produce electricity.