

Conservation SHOWCASE



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Crook County Rancher Partners with NRCS to Save Sage-Grouse

Paulina, Ore. – One hundred million years ago during the earth’s cretaceous period, Gary Bedortha’s ranchland was a shallow ocean supporting a rich community of sea life. Today, that same land rises 5,000 feet above sea level, and supports a different kind of ecosystem – one rich with sagebrush, bitter brush, juniper, elk, deer, snakes, bobcats, coyotes, cougars, eagles, hawks and the sage-grouse.

Gary’s knowledge and management of his ranch’s ecosystem has made him a valuable partner with USDA Natural Resources Conservation Service (NRCS) in a strategic conservation effort known as the Oregon Sage-Grouse Initiative (SGI). “Gary was one of the first ranchers to participate in this initiative” says Chris Mundy, USDA-NRCS District Conservationist for Crook County. “He saw the same issues threatening sage-grouse also undermining the long-term sustainability of his ranch.”

To reverse the declining populations of the greater sage-grouse, ranchers are partnering with NRCS and the Oregon Department of Fish and Wildlife (ODFW) to implement the Oregon Sage-Grouse Initiative. The SGI is a focused strategy for investing Farm Bill and other conservation resources. The purpose of this initiative is to make measurable and significant progress in alleviating a specific threat to sage-grouse in Oregon—the expansion of western juniper. Western juniper is

ABOVE: Gary Bedortha surveys his ranchland



Grazing cattle on the Bedortha Ranch

a native tree that has greatly expanded beyond where it occurred historically moving into sagebrush steppe areas.

Gary has watched the sage-grouse population decline as western juniper has encroached into the sagebrush ecosystem over the years. “When I was



Sage-grouse

young growing up in this country, I knew some of these draws had in excess of 100 sage-grouse—you would ride through the draws and the whole ground would move in front of you. At that time, we didn’t have the juniper like we do now.”

Gary has been able to engage in an aggressive schedule of juniper removal in order to improve and protect the sage-grouse habitat.

“It’s a good program,” says Gary. By complimenting some earlier juniper removal

efforts with enrollment in the SGI, 7,000 acres of sagebrush-steppe land on the Bedortha Ranch has now been restored.

Chris Mundy, who has provided leadership for the conservation service in Crook County for five years, says the program is different from past efforts. “Now we shore up the best bird populations and make sure they can exist in the long run. Instead of trying to work everywhere, we focus our efforts where we can maximize our benefit for the birds.” Chris attributes the success of the program to its multiple benefits, “It’s good for the birds and good for the land overall benefitting these ranchers,” he says.

The spread of juniper into important “leks,” nesting and brood-rearing areas, is perhaps most problematic for grouse. “Leks” are traditional mating grounds where the courted hens gather to get a clear view of the colorful males as they strut and perform their mating dance.

According to NRCS statewide habitat biologist Jeremy Maestas, “Sage-grouse are highly philopatric, which means they tend to return to the same breeding areas every year. When

the breeding habitat is first invaded by juniper, birds may continue to use these areas but suffer increased mortality by predators. With too many trees, birds disappear as they begin to avoid these area altogether.”

“Sage-grouse don’t like anything tall,” says Chris. “They want to see for miles and anything up in air is a threat.” Even if the land is sparsely inhabited with trees, grouse don’t want to go there. Trees taller than the native shrubs—or approximately four feet high—might hold predatory birds including eagles, hawks and ravens. Avian predators sit atop their new perches, waiting to swoop down on their next meal of grouse adults, chicks or eggs.

Western juniper trees grow for about 15-25 years before topping most native shrubs. After that, they can really shoot up, depending on water availability. Chris explains that once the tree population reaches six feet tall or 20-30 individuals per acre, “If you don’t do something,

these trees really start having an impact on the desirable native understory plants.” Understory plants grow under a canopy of other plants and usually include grasses, forbs and low shrubs. These plants are necessary to create a healthy rangeland environment. The Oregon Sage-Grouse Initiative focuses juniper removal efforts in areas that are still in the early phases of invasion to prevent trees from reaching the density where damaging thresholds are crossed.

On the Bedortha Ranch, the effort to remove juniper is in full throttle. Crews of workers are busy cutting and flattening trees. Even the smallest junipers are removed, because if permitted to grow, they will become a problem for the sage-grouse, the ecosystem, and the rancher in 20 years. According to Chris, most of the trees on the Bedortha Ranch are in the 80-90 year old range, which is relatively young for juniper. Wildfires historically killed juniper and kept it out of sagebrush ecosystems, but natural fire regimes were severely altered in the late 1800’s and early

Western Juniper threaten sage-grouse habitat





Ranchers and Sage-grouse depend on a healthy sagebrush habitat

1900’s, allowing trees to greatly expand their range. “We want to take it back to where it was,” says Chris.

As the juniper trees grew and reproduced over the past century, they slowly but surely squeezed out the habitat for the sage-grouse. “The junipers out-compete everything,” says Chris. “First the brush goes out, then the grass goes out and then you have no top soil layer.” When plant cover is destroyed, there are no roots left to hold the soil in place.

Sage-grouse are true sagebrush obligates. They eat sagebrush leaves and buds and are dependent on it for cover all year. A sagebrush plant has both deciduous and evergreen leaves so there are always leaves on the shrub.

Several varieties of sagebrush thrive in Crook County. Mountain Big Sagebrush and Wyoming Big Sagebrush are the primary species of tall

sagebrush in the area, followed by the lower species Low Sagebrush and Early Sagebrush. If sagebrush is lost from the area, the sage-grouse disappear as well.

“What’s good for sage-grouse habitat is good for the rangeland,” says Chris. Gary Bedortha’s stewardship of sage-grouse habitat on his 20,000-acre ranch ensures that his rangeland—with an ecosystem containing a diversity of wildlife, domestic livestock, plant life, soils and waterways—will thrive for future generations.