

## THREATS



### Conifer Encroachment

Sage grouse breeding habitat is lost to invading junipers when trees exceed 4% canopy cover. Focused tree removal prevents conversion of sagebrush steppe to conifer woodlands and benefits sage grouse populations.



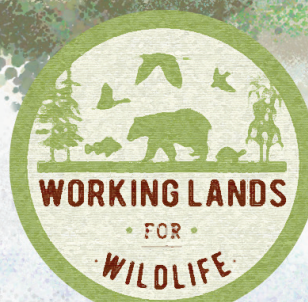
### Benefits of conifer control

1. Maintaining native understory plants.
2. Reducing risk of large and severe wildfires.
3. Improving habitat for declining species.
4. Reducing soil erosion and conserving soil water.
5. Increasing ecosystem resilience to fire and resistance to cheatgrass.



Did you know that trees catch the snow?

Removing encroaching conifer stands from sagebrush ecosystems helps keep snow on the ground longer during the spring. This allows water to seep slowly into the ground to better sustain plants, streams, and wildlife during the West's hot, dry summer.



[nrcs.usda.gov/wildlife/sagegrouseinitiative.com](https://nrcs.usda.gov/wildlife/sagegrouseinitiative.com)

The Sage Grouse Initiative is a partnership-based, science-driven effort that uses voluntary incentives to proactively conserve America's western rangelands, wildlife, and rural way of life. This initiative is part of Working Lands For Wildlife, which is led by USDA's Natural Resources Conservation Service.

# HEALTHY SAGEBRUSH COMMUNITIES



## THE SAGE GROUSE IS AN UMBRELLA SPECIES

Studies have shown that conservation efforts for sage grouse also help 350 other species of plants, invertebrates, amphibians, reptiles, birds and mammals inhabiting the sagebrush sea, like mule deer and songbirds.



### MULE DEER

Conservation measures set in place for sage grouse significantly increase the protection for mule deer migration and winter habitat.



### MESIC MEADOWS

Wet "mesic" habitat, or places where water meets land comprise less than 2% of the entire landscape in the West. Protecting and restoring these "emerald islands" in the desert benefits livestock ranching and wildlife, including sage grouse.



### SONGBIRDS

Songbirds like the Brewer's sparrow, sagebrush sparrow and sage thrasher are 13-19% more abundant near large leks, which support half of all sage grouse populations.



### FENCE MARKING

Sage grouse can collide with livestock fences when flying low over sagebrush. When grouse fly into their breeding grounds, or "leks," the dim predawn light makes it difficult to avoid fence wires. By placing markers on fence wires, ranchers are doing their part to reduce the potential for fence collision by 83%.



### PRESCRIBED GRAZING

Sage grouse eat different things depending on their age and the season. Rest-rotation grazing boosts the abundance of arthropods, like spiders and butterflies, a key part of the sage grouse diet in spring and summer, particularly for growing chicks. Rested or deferred pastures from grazing host the most arthropods important for nutrition.



### Raptors

Conifers provide perches for predators.



### Invasive Grasses

The spread of invasive annual grasses, like cheatgrass and medusahead, are linked to unwanted wildfires. Invasive grasses are highly flammable and dry out earlier than native plants, leading to more frequent, hotter fires. Once sagebrush habitat burns in a megafire, it's hard to restore, leaving noxious weeds that degrade rangelands and wildlife habitat.

These invasive grasses replace the sagebrush sea's diverse, native plants — like sagebrush, wildflowers, and bunchgrasses — with a monoculture of weeds. That's bad for birds and herds, which rely on nutritious, native perennial plants.

## HEALTHY RANGE

### Solution

Conservation on working western landscapes restores sagebrush communities where sage grouse and other wildlife share the same extensive home range, and helps ranchers pass on their legacy and rural way of life.

## THREATS

