



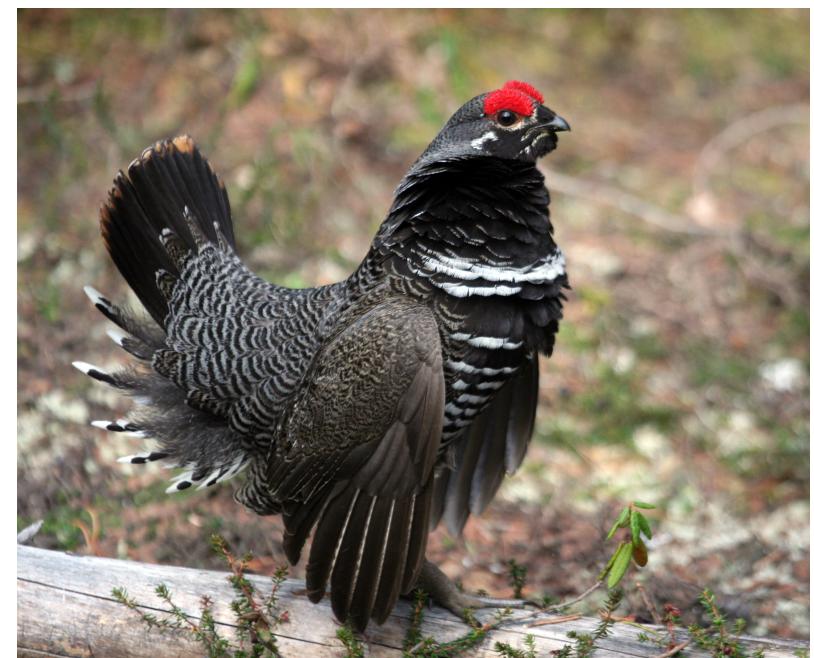
The Greater Sage-Grouse

(*Centrocercus urophasianus*)

- Ground-dwelling upland game bird species
- Largest grouse species in the United States



Forest Grouse



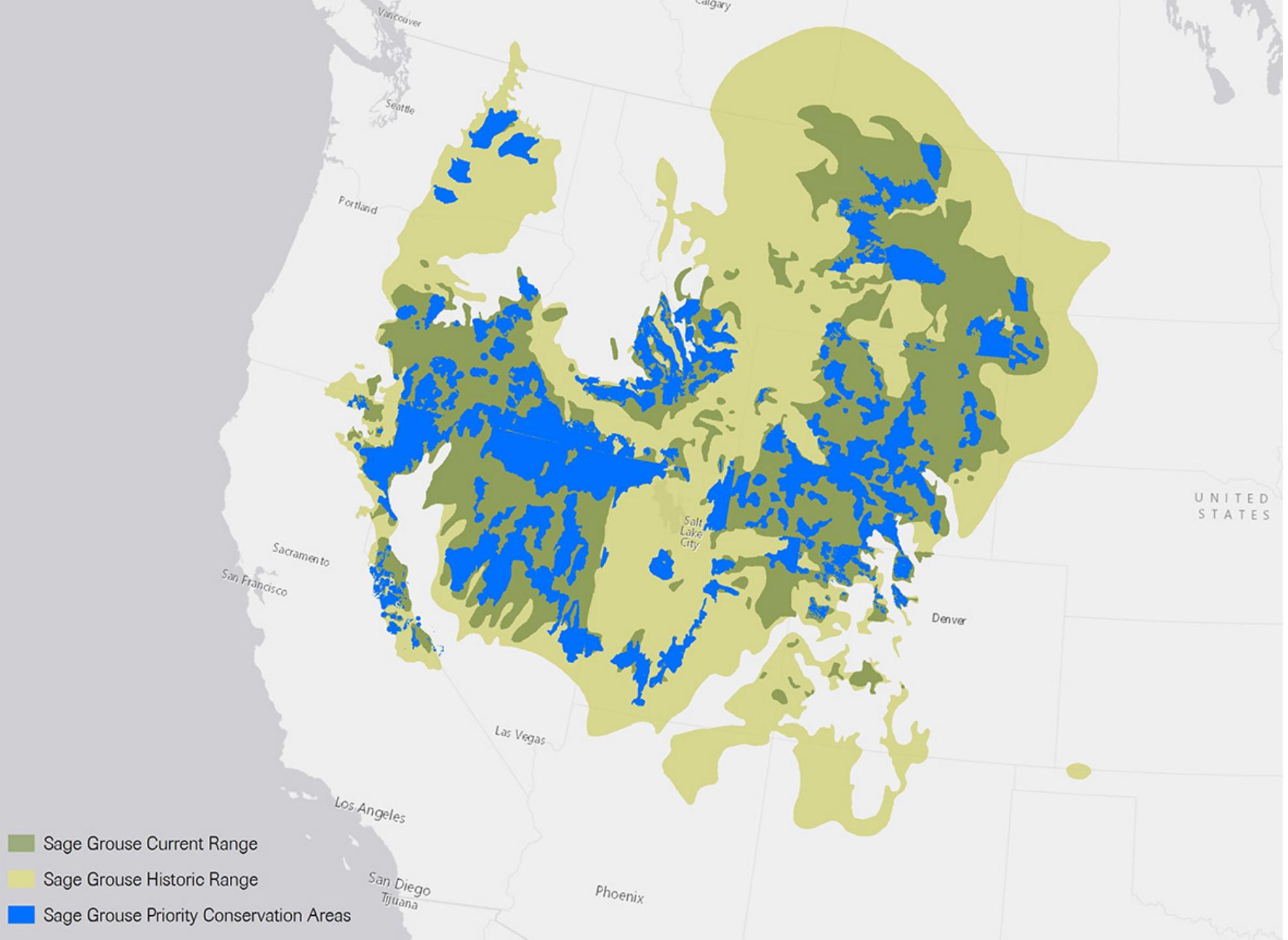
Prairie Grouse



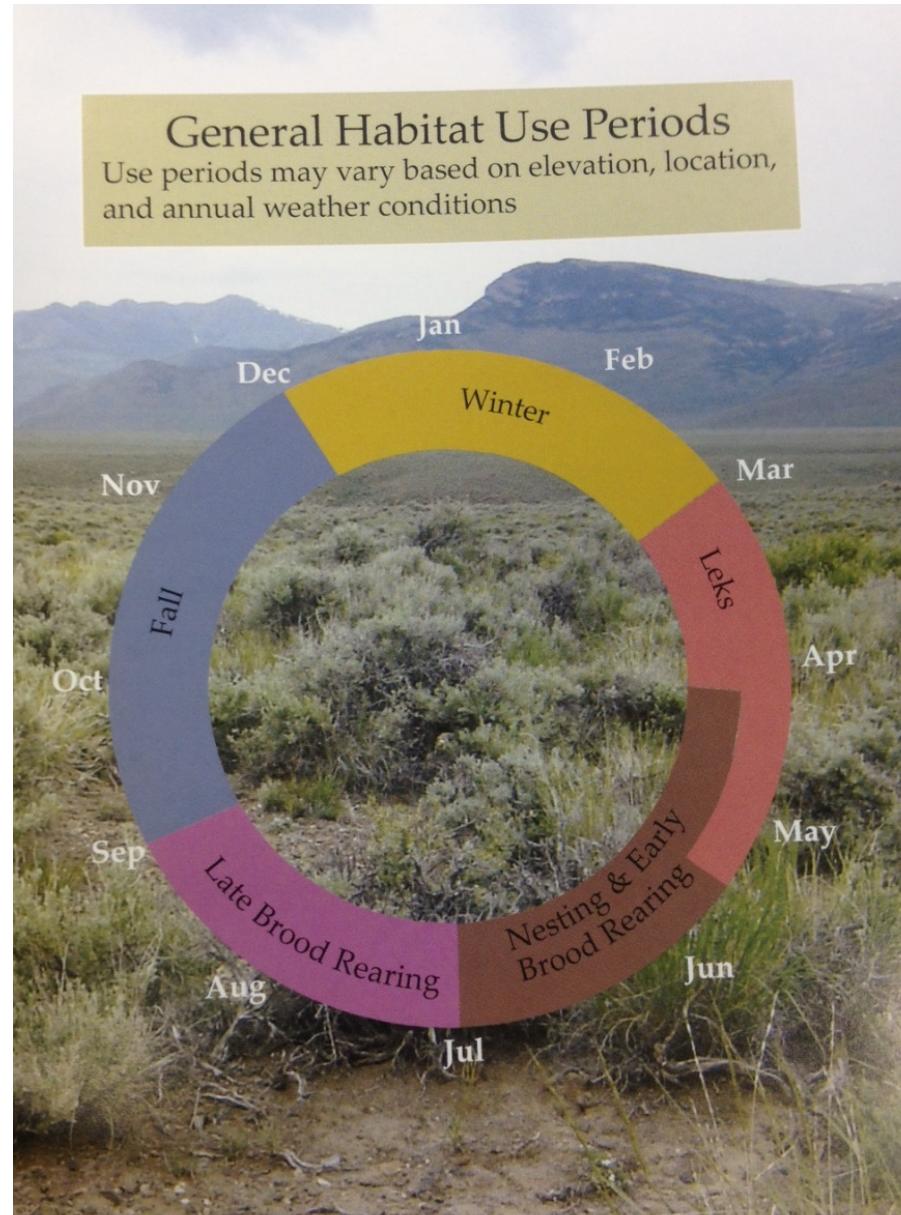
Sagebrush Obligate Species

- Nesting
- Cover
- Food





Sage-grouse life cycle



Breeding (March-June)

https://www.youtube.com/watch?time_continue=61&v=1Su0bu-CYfA

- Polygynous mating
- Open areas adjacent to sagebrush
- Return to the same leking grounds year after year

Nesting & Early Brood-Rearing (May-June)

- Nest within 2-3 miles of Lek site but can be up to 11 miles
- Nests located under sagebrush or other arid-desert shrubs
- 6-7 eggs per clutch
- Lowest reproductive rates of any North American game bird



Ideal Nesting Habitat Characteristics

- Critical and highly sensitive stage in the lifecycle
- Specific habitat characteristics are needed to increase success rate
- Protection from predators and access to food



Sagebrush

- 15-25% sagebrush canopy cover
- 15-30" in height
- Spreading structure

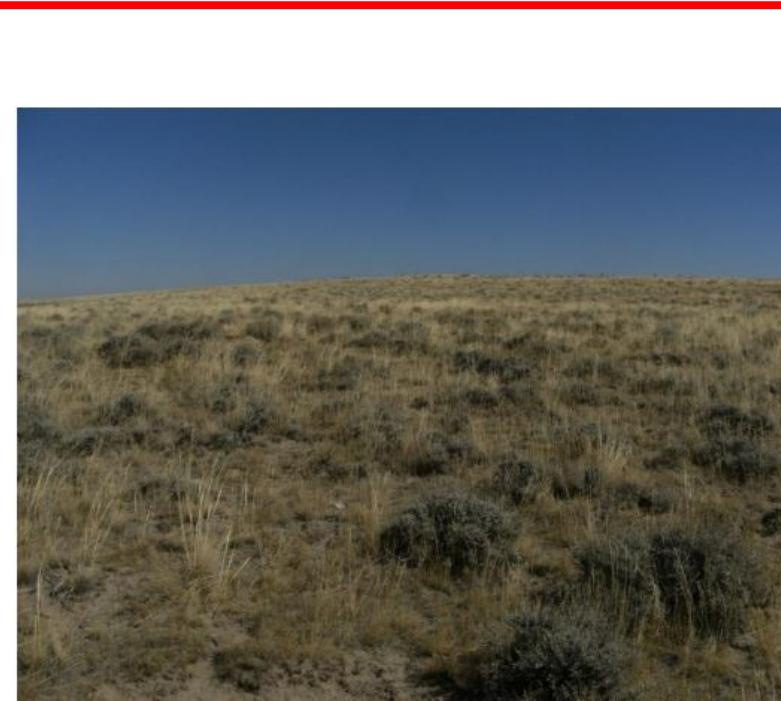
Perennial grasses & Frobs

- >25% cover
- >7" in height
- Variety

Sagebrush Canopy Cover



5%



15-25%



30%

Sagebrush Structure



Columnar



Spreading

Late Brood-Rearing (July-September)

Sagebrush

- 10-15% canopy cover
- 15-30" in height
- **<100 yards from brood rearing habitat**

Perennial grasses & Forbs

- >15% cover

Riparian and wet meadow

- Wetland plant species dominate
- Little to no bare ground
- High abundance of succulent forbs



Fall & Winter (September-March)

- Diet shifts from wetland forbs and insects to predominantly sagebrush
- Habitat dependent on snow depth, elevation, aspect
- Sagebrush 10-14" above snow depth
- 10-30% canopy cover



Landscape species

- Due to this type of lifecycle, Sage-Grouse are highly dependent on specific landscape mosaics
- Moving from one habitat to the next requires large sagebrush landscape connectivity.

Potential Impacts

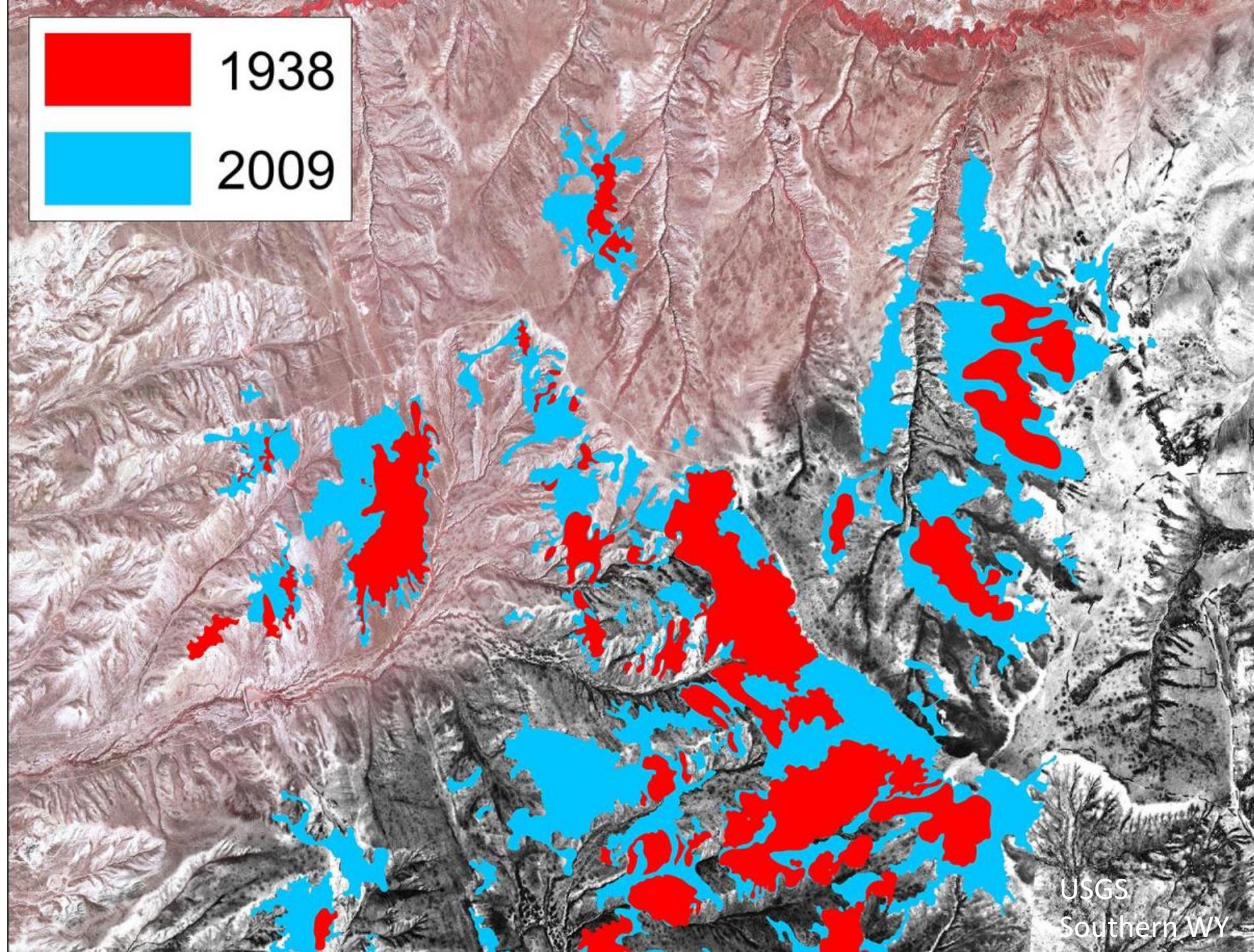
- Inharmonious Grazing practices
- Changes in wildfire regimes
- Juniper expansion
- Invasive species
- Urban development
- Changes in land use



- More frequent fire return intervals
- Sagebrush is not a resprouter



- Juniper have expanded approximately 4 times from their historical range
- Primarily due to fire suppression
- Threat to sagebrush-bunchgrass communities
- Cause more severe wildfires



- Winter annual grass
- Produces hundreds of seeds per plant
- Seeds stay viable for years
- Dries out fast producing flash fuel for fast moving and extensive wildfires.



History of Sage-Grouse and the endangered species act

- 2005 an endangered listing was not warranted by USFWS.
- Lawsuit overturned the decision ruling that the agency hadn't considered the best available science.
- 2010 the Sage-Grouse is considered warranted under the endangered species act but precluded by other, higher conservation priorities.
- A USFWS listing or non-listing must be declared by 2015.
- Listing the Sage-Grouse would be the broadest, in terms of geographical range, application of the act, affecting over 165 million acres of land.
- This drew a lot of attention towards conservation and monitoring.
- In 2015 the bird was considered not warranted.
- Monitoring efforts continue.

