

Sage-grouse Ecology 101

Idaho Department of Fish and Game

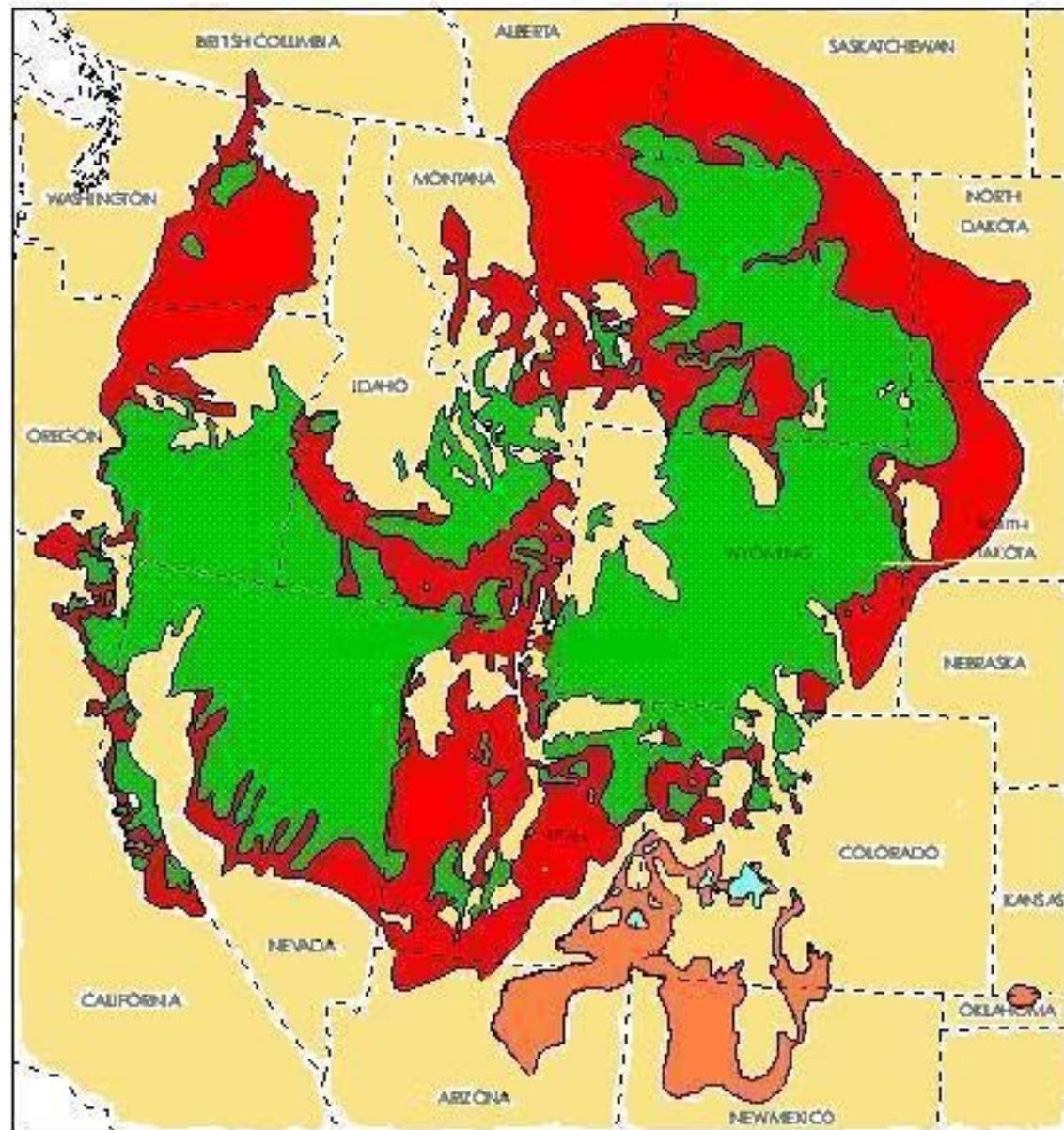


Classification



- Sage-grouse are a Gallinaceous bird
- They are the largest grouse in North America
- There are 2 species of sage-grouse: Greater and Gunnison

Distribution



HISTORIC RANGE

CURRENT RANGE

Sage-grouse are unique

Compared to other North American game birds:

- Low reproductive rate

- Average 7-8 eggs
- Rarely re-nest (~20%)



Sage-grouse



California quail

Sage-grouse are unique

- Long-lived
 - 7+ years
- High annual survival rate
 - Higher for females (range 48-78%) than males (58-60%)



Sage-grouse are unique

- High over-winter survival
 - 85-100%

How do
they do
it?

They eat
sagebrush!



Sage-grouse are a landscape species

Many populations are migratory

- Large movements between seasonal ranges
 - >12 miles
- Large annual home ranges
 - >231 miles²



Seasonal Habitat Requirements

- Breeding
- Nesting and early brood rearing
- Summer/late brood rearing
- Fall
- Winter

Breeding



Nesting



Nest habitat requirements

- Most nests under sagebrush (59-100% range wide)
- Often nest under denser, taller shrubs



Grass and forb cover also help obscure nest



Early brood rearing

- Chick survival 12-50%, various studies
- Idaho study 25-55% to 3 weeks of age





Forbs =
nutritious food

Shrub +
grasses =
protection from
predators

Diversity =
insects for high
protein



chick
survival

Weather

Hen
experience

Late brood rearing

Broods move to areas with green vegetation; sagebrush usually nearby



Late brood rearing

Distances moved vary, depending on juxtaposition of habitats

- In SE Idaho broods moved up to 51 miles!



Fall = transition habitat



Winter



Sagebrush available above snow



Questions?

