

Greater Sage-Grouse Biology & Status

January 2012

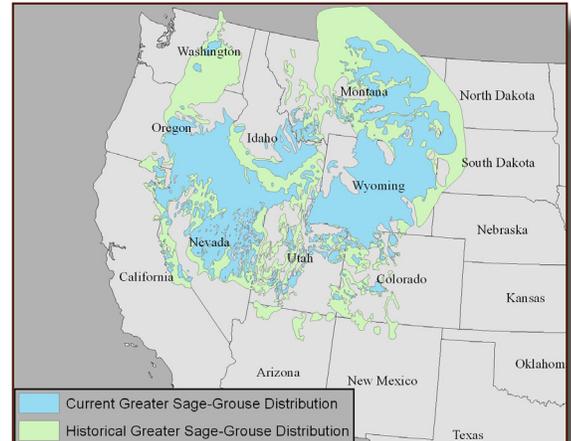
Nevada Fish and Wildlife Office

Conserving the natural biological diversity of the Great Basin, eastern Sierra, and Mojave Desert



Male greater sage-grouse. Photo: Steven Ting

Greater sage-grouse occur in Washington, Oregon, Idaho, Montana, North Dakota, South Dakota, Wyoming, Colorado, Utah, Nevada, California and the Canadian provinces of Alberta and Saskatchewan. Greater sage-grouse occupy approximately 56% of their historical range



Life History

Greater sage-grouse, commonly referred to as sage-grouse, sage hen, sage fowl, sage cock, or sage chicken, is a large, ground-dwelling bird, up to 30 inches long and two feet tall, weighing from two to seven pounds. It has a long pointed tail with legs feathered to the base of the toes. Females are mottled brown, black, and white which serves as camouflage from predators. Males are larger and more colorful than females with white feathers around the neck and bright yellow air sacs on their breast, which they inflate during their mating display.

The birds occur at elevations ranging from 4,000, to over 9,000 feet and are dependent on sagebrush for cover and food. Greater sage-grouse typically have a short life span; however they may live nearly a decade.

During the breeding season, male greater sage-grouse gather together and perform courtship displays in areas called leks (also known as “strutting grounds”), which are relatively open sites surrounded by denser sagebrush. Leks, which may be as large as a football field, are used for many

generations by greater sage-grouse.

Males defend individual territories within leks by strutting with tails fanned and emitting drumming sounds from the air sacs on their chests to attract females. The mating season generally begins in March but may vary depending on weather conditions. Females lay a clutch of six to nine eggs from mid-March to mid-May. Greater sage-grouse hens raise one brood in a season.

One of the most interesting aspects about the greater sage-grouse is its nearly complete reliance on sagebrush. Throughout much of the year adult greater sage-grouse rely on sagebrush to provide roosting, cover, and food. Sagebrush provides cover for nesting and associated plants host high-protein insects, a vital food source for chicks in their first month of life. In winter, over 99 percent of greater sage-grouse diet is sagebrush leaves and buds.

Threats

Habitat loss and fragmentation are the greatest challenges to

greater sage-grouse conservation. They cannot survive in areas where sagebrush no longer exists. The distribution of greater sage-grouse has contracted from historical times, most notably along the northern and northwestern periphery and in the center of their range due to loss of sagebrush habitat.

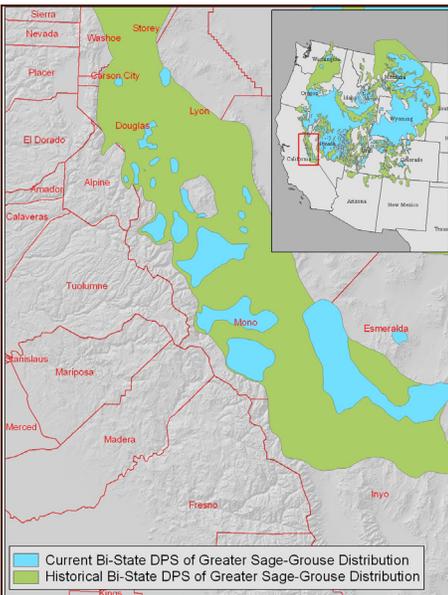
A sagebrush community may take years to recover from disturbance. Impacts can result from direct habitat loss or fragmentation of important habitats by energy development, powerlines, pipelines, and roads, or other man-made structures. Other important factors in the species’ decline include wildfire and invasion by native and non-native plant species.

Species Conservation

Conservation efforts have expanded throughout Nevada. Federal and state agencies as well as many private landowners are incorporating and considering greater sage-grouse conservation measures in current and future land management activities. To be effective, these conservation actions require addressing immediate and long-term threats to the species.

Listing Status

In March 2010, the U. S. Fish and Wildlife Service (Service) determined that the greater sage-grouse warranted protection under the Endangered Species Act (ESA); however, listing at that time was precluded by higher priority actions. This decision placed the greater sage-grouse on the candidate species list in 11 western states, including a Bi-State Distinct Population Segment (DPS) of greater sage-grouse in west-central Nevada and east-central California.



Candidate species are assigned a listing priority number from one to 12 based on the magnitude of threats they face, the immediacy of the threats, and their taxonomic uniqueness (for example, full species have higher priority than subspecies). The species' listing priority number dictates the relative order in which proposed listing rules are prepared, with the species at greatest risk (listing priority one through three) being proposed first. The listing priority number assigned to the Bi-State DPS of greater sage-grouse is three and the listing priority number assigned to the wider ranging greater sage-grouse is eight.

Although the greater sage-grouse is afforded no protection under the ESA as a candidate species, adding it to the candidate list

allows the Service and other agencies an opportunity to work cooperatively with landowners to conserve the species. Financial assistance is available through multiple federal agencies including various Service grants and agreements.

Next Steps

In an effort to improve implementation of the ESA, the Service will systematically review and address the needs of more than 250 candidate species over the next six years. A multi-year listing work plan, first developed through an agreement with the plaintiff group WildEarth Guardians, was filed in the U.S. District Court for the District of Columbia in May 2011. In July 2011, the Service reached an agreement with the plaintiff group Center for Biological Diversity that reinforced this multi-year work plan. These historical agreements were approved by Judge Emmet Sullivan on September 9, 2011.

As part of that agreement, the Service committed to complete the review of the Bi-State DPS of greater sage-grouse by 2013 and the wider ranging greater sage-grouse by 2015.

