Greater Sage - Grouse

What is the greater sage-grouse?

Greater sage-grouse is a large grounddwelling sagebrush obligate with a chunky, round body, small head, and long tail. The bird is native to the sagebrush steppe ecosystem of the American West. These birds are highly dependent on sagebrush for food and cover. In western South Dakota (SD), the birds are on the far eastern edge of their range.

What is their status?

The greater sage-grouse has previously been a candidate for listing under the Endangered Species Act (ESA) primarily due to loss of habitat and long-term population decline. Candidate species are those for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information to list as threatened or endangered. In 2015, the USFWS found that listing the greater sage-grouse under the ESA was not warranted. Currently, the sage grouse is considered Near Threatened.

Where in SD do they call home?

This species occurs in grassy cover containing Wyoming big sagebrush and occasionally silver sagebrush. This bird mainly occurs in Butte and Harding Counties in northwestern SD from Belle Fourche north to the North Dakota state line and west to the Wyoming and Montana state lines. The species may occasionally be seen in Fall River County in southwestern SD. The Natural Resources Conservation Service (NRCS) and others have developed a map identifying key areas of the state as greater sage-grouse habitat. The bird is present in these areas year-round. A copy of the map is found on this publication.

Where am I most likely to see this bird?

Greater sage-grouse are closely associated with Wyoming big sagebrush and exclusively use the plant for food in the winter. In SD, nesting, brood-rearing, and over-wintering habitats occur in the same general area.

Nesting and brood-rearing habitat typically is sagebrush plant communities located within four miles of an active lek (approximately 90% of nesting occurs within four miles of an active lek.) A "lek" is an area with little vegetation and a large field of view where multiple male birds display (dance) to attract watching females.





In SD an active lek is a location where two or more males are seen dancing for one out of five years. Riparian areas and other moist areas with silver sagebrush and forbs are thought to be especially important for brood-rearing because these areas attract insects, an important source of protein for growing chicks.

What are the threats?

- Habitat conversion, alteration and fragmentation.
- Loss of Wyoming big sagebrush.
- Grazing that negatively impacts native plant communities and increases nonnative species.
- Woody plant invasion and invasive plant species.
- Structures, including fences, placed in proximity too close to leks.
- West Nile Virus.
- Road construction and mining/exploration.



GREATER SAGE-GROUSE



What are the opportunities?

The SD NRCS provides technical and/ or financial assistance to landowners to address threats to this species that may occur on their land. Stop in and ask the local NRCS office to assist you with preparing land management plans which will achieve your objectives and help this bird.

Several specific actions landowners can take are:

Improve Open Landscapes:

- Convert cropland or hayland to native cover by establishing native rangeland species including big and/or silver sagebrush.
- Maintain and improve the health of sagebrush grasslands.
- Remove, relocate or mark with reflectors problem fences within 1/4 mile of an active lek or in areas of known flight collisions.
- Remove all trees that have invaded sagebrush grasslands.
- Remove or bury overhead utility lines.
- Remove dugout spoil piles, tall (6 feet high or taller) gate posts, old buildings, junk piles, culverts, or other obstructions within sagebrush grasslands that may benefit sage-grouse predators.
- Avoid installing new windbreaks and/ or shelterbelts in native grassland or within three miles of an active lek.

- Implement conservation practices that improve or maintain the health or function of riparian areas.
- Large contiguous areas of unfragmented rangelands provide critical space for sage-grouse habitat.

Maintain and Improve Healthy Grazing lands

Grazing maintains grassland habitats. However, preferred plants may disappear, and excessive litter buildup may occur if grazing does not occur in a manner that sustains grassland plants. Ensure that a sustainable grazing system is developed and implemented that addresses both livestock and bird needs. Several grazing ideas are outlined below:

- Manage the intensity, frequency, timing, and duration of grazing to provide for adequate recovery time for plants by controlling the amount of forage removed. Typically, 50% utilization during normal growing conditions and rotating livestock through pastures to minimize occupation periods by livestock and maximize recovery periods.
- Maintain or enhance existing height and canopy cover of big sagebrush and silver sagebrush. Avoid grazing the same pasture during the same period of the growing season in consecutive years.
- Implement yearly grazing land monitoring to evaluate how vegetation, livestock and wildlife are responding to management.
- Defer grazing on 20% of available nesting habitats to allow complete growing season deferment in year one continuing

through the end of the nesting season in year two (April 1 in Year one through July 15 in Year two).

• Defer riparian areas until late summer or fall, and/ or only utilize these areas lightly in the spring. Avoid grazing mesic or riparian areas in June, July, and August (hot season) and manage annual grazing utilization along mesic areas for 50% or less (take half leave half). This could be achieved by lightly "flash" grazing in May or earlier, remove the livestock and then return after mid- September; or begin grazing after mid-September with a less than 50% overall utilization at end of year. Maintaining grass stubble heights along the stream channels is important for the stream bank protection and riparian health (4-8 inches are common target heights). In many cases managing riparian areas are as unique grazing units is required to achieved desired results.



To learn more contact your local NRCS office, or go to sd.nrcs.usda.gov.