

Crucial Habitat Area Narrative

Region:	Sheridan
Habitat Priority Area Name:	Sagebrush/Mixed Grass Habitats within Major Sage-Grouse Complexes
Habitat Area Type:	<input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Combined Sagebrush/mixed grass habitat.
Habitat Values:	<p>Sagebrush has been demonstrated to be a critical food source for several wildlife species, especially sage grouse, pronghorn and mule deer during various seasons of the year, particularly fall, winter and spring.</p> <p>Much of the area has been designated as core sage grouse habitat by the Governor’s working group.</p> <p>Supports a number of sagebrush and grassland obligates identified as SGCN in the CWCS report.</p> <p>Sagebrush-dominated mixed grass communities are being impacted on several fronts by various human activities including but not limited to vegetation chemical manipulation, vegetative community conversions, livestock grazing, subdivisions and energy developments.</p>
Reason Selected:	<p>There are a host of sagebrush and grassland obligate and near-obligate wildlife species requiring conservation and maintenance to maintain populations. The Fish and Wildlife Service is initiating a status review of the Greater sage-grouse to determine if the species should be protected under the Endangered Species Act throughout its range or any significant portion of its range.</p> <p>Due to the cumulative effects of human impacts and habitat degradation and conversion in Northeast Wyoming, conservation efforts directed in these communities there is a need to protect and enhance these areas to maintain wildlife populations and their habitats.</p>
Area Boundary Description:	High-density sage-grouse habitats and the Governor’s core sage grouse habitat areas.
Primary species or assemblages of species within area:	Sage-grouse mule deer, pronghorn and sagebrush-dependent SGCN identified in the CWCS report.
Secondary species or assemblages of species within area:	<p>Sagebrush obligate passerines identified as SGCN in the CWCS report, including but not limited to lark bunting, peregrine falcon, short-eared owl, prairie vole, Townsend’s big-eared bat and Western small-footed myotis.</p> <p>Mixed-grass prairies are host to several SGCN species including:</p>

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bobolink, burrowing owl, grasshopper sparrow, lark bunting, long-billed curlew, short-eared owl, Swainson's hawk, upland sandpiper, prairie vole, Western small-footed myotis and black-tailed prairie dog.

Solutions or actions:

Develop cooperative management agreements with BLM, USFS, State Land Board, private landowners, and other interests to maintain open spaces and healthy ecosystem functions. This may include grazing strategies, vegetation manipulation, herbicide control plans, etc. that benefit and maintain wildlife habitat.

Seek conservation easements with willing private landowners.

Develop collaborative efforts and agreements with livestock producers to improve grazing systems to enhance their mixed-grass communities while retaining sagebrush.

Work with Weed and Pest Districts to employ sagebrush friendly methods of controlling leafy spurge invasions. Chemically based methods often damage and/or kill sagebrush plants and associated forbs.

Work with the BLM and O&G industry to delineate important sage-grouse habitats and develop methods and policies to help protect the effectiveness of these habitats for sagebrush obligates.

Additional Information:

Montana researchers found three different species of sagebrush comprised 93% of the winter diet of pronghorn. Shrubs (primarily sagebrush) are used almost exclusively by pronghorn from November through March and moderately through the other months.

Big sagebrush is a highly nutritious and digestible food source for big game animals such as mule deer. During winter, big sagebrush has a higher crude protein level and digestibility than most other shrubs or grasses. Sagebrush also provides cover (nesting, resting and escape) for a wide variety of game and non-game species (i.e. protective cover for fawns, calves, nesting birds, sage grouse broods, etc.). Research in Montana revealed that, during the breeding season, sage grouse utilize habitat with a canopy coverage of big sagebrush ranging from 20-50%. Wintering sage grouse were found in an average of 28% sagebrush cover and nesting birds in an average of 20-30% sagebrush cover. Another species of special concern is the pygmy rabbit. The pygmy rabbit is limited to habitat types that contain tall dense sagebrush.

Sagebrush has other assets for wildlife in addition to forage and cover. Its thick canopy protects understory vegetation from livestock grazing. Understory vegetation can be a valuable food source for wildlife. Additionally, the crowns of sagebrush plants tend to

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breakup and weaken hard crusted snow on winter ranges making it easier for big game to access understory plants for foraging.

Sagebrush-dominated mixed grass communities are being impacted on several fronts including conversion to winter wheat and non-native hay ground, chemically treated and burned to increase forage for livestock and facilitate the control of leafy spurge, and coal-bed natural gas (CBNG) infrastructure installation that perforates and incises sagebrush patches. In addition, land managers are conducting sagebrush-spraying projects in an effort to facilitate the control of leafy spurge. These control efforts not only kill sagebrush, they also eliminate much of the forb component within the community. The most recent threat to sagebrush communities is caused by coal-bed natural gas (CBNG) infrastructure installation that perforates and incises sagebrush patches. Many reclamation efforts are not meeting standards. CBNG activities are also reducing the effectiveness of sagebrush habitats for sage-grouse. There are presently 7,000 CBM wells in NE Wyoming, with predictions of 139,000, with 50,000 drilled by 2010.

**Land ownership and
surface area:**
