

## Sage Grouse Fact Sheet

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The sage-grouse (*Centrocercus urophasianus*), which was first described for science by Lewis and Clark during their 1804 expedition, is an inhabitant of the open sagebrush plains. It is a large, ground-dwelling, chicken-like bird, up to 30 inches in length 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.

Their mottled brown, black and white coloring serves as a camouflage from predators. The males are larger and more colorful than females, and they have a black throat and bib, white feathers along the sides of the neck, and a large white ruff on the breast. Males also exhibit two large, frontally directed air sacs of olive-green skin and yellow combs. Both are inflated during breeding display.

The sage-grouse is found from 4,000 to over 9,000 feet in elevation. It is omnivore, eating soft plants, primarily sagebrush, and insects. One of the most interesting aspects about the sage-grouse is its nearly complete reliance on sagebrush. Throughout much of the year, adult sage-grouse rely on sagebrush to provide roosting cover and food. The type and condition of shrub-steppe plant communities strongly affect habitat use by sage grouse populations, but these populations also exhibit strong site fidelity (loyalty to a particular area). These birds cannot survive in areas where sagebrush no longer exists. Sage-grouse may disperse up to 100 miles between seasonal use areas; however, average individual movements are generally less than 21 mile

During the spring breeding season, male sage-grouse gather together and perform courtship displays on display areas called leks (also known as “drumming grounds”), which are relatively open sites and often surrounded by denser shrub-steppe cover. Males defend individual territories within leks, strutting with tails fanned and emitting plopping sounds from the air sacs on their chests to attract females. The mating season generally begins at the same time each spring, but ultimately depends on weather and vegetative conditions. Some leks are used for many years.

Females lay a clutch of 7-8 eggs from mid-March to mid-June. Sage-grouse hens raise one brood in a season. The average life span of sage-grouse is 1 to 1-1/2 years. However, they have been found to survive up to 10 years in the wild. In the evening until early morning, they roost on the ground. Approximately half of sage-grouse mortality is caused by predators, including raptors, badgers, ravens and ground squirrels (eat the eggs).

In the summer sage-grouse depend on sagebrush for shelter from predators, while the grass and plants under the sagebrush provide materials for nesting and high-protein insects for food, a critical diet for chicks in their first month of life. In winter, over 99 percent of their diet is sagebrush leaves and buds.

Common names for sage-grouse include: sage hen, sage fowl, sage cock, sage chicken, heath cock and heath hen. Adult sage-grouse have dark-green toes. In early fall, comb-like fringe appears alongside each of the three toes which then act as snowshoes for walking on deep snow

and are shed in the spring.

Sagebrush is a woody shrub with silvery leaves that stay green all year. Sagebrush is easily identifiable by its sharp odor, described by pioneers on the Oregon Trail as a mixture of turpentine and camphor. Although sagebrush may seem hardy, a sagebrush community may take years to recover from fire and some range management practices. In some areas of the Columbian Basin where a large fire burned 40 years ago, sagebrush has still not returned. A number of wildlife species depend on healthy sagebrush habitat, including larks, burrowing owls, long-billed curlews, sage sparrows, sage thrashers, loggerhead shrikes and pygmy rabbits.

The historic range of the sage-grouse included Washington, Oregon, eastern California, Nevada, Idaho, Montana, Wyoming, western Colorado, Utah, South Dakota, North Dakota, Kansas, Oklahoma, Nebraska, New Mexico, Arizona, and the Canadian provinces of British Columbia, Alberta, and Saskatchewan. Sage-grouse are no longer found in Nebraska, Kansas, Oklahoma, New Mexico, Arizona, and British Columbia. The distribution of greater sage-grouse has contracted, most notably along the northern and northwestern periphery and in the center of the historic range.

Rangewide estimates of sage-grouse abundance prior to European settlement in western North America vary, but consensus estimate is that there may have been about 1.1 million birds in 1800. The 1998 rangewide spring population numbered about 157,000 sage-grouse. More recent estimates put the number of sage-grouse rangewide at roughly between 100,000 and 500,000 birds.

A recent sagebrush die-off in Utah has affected approximately one million acres of sagebrush habitat - 600,000 acres of those are directly associated with wildlife. It is believed that this is the only major die-off of sagebrush since white settlers arrived in the area in the mid-1800s. At this time, the elevation of the large die-off of sagebrush seems to be below 7,000 feet and involves mainly Bureau of Land Management land. The die-off is thought to be a result of the continuing stress on the plants due to the 5-year drought ongoing in Utah. In addition, most of the sagebrush is made up of older plants, with little new growth being found. If this drought continues, it is believed that next year sagebrush located at higher elevations (7,000 feet and above) will suffer similar loss. In Utah, higher elevations of sagebrush are found on USDA-Forest Service lands.

Last updated 1/5/04