# Profile of the Greater Sage-Grouse



Male Greater Sage-Grouse on lek

### Scientific Name

Centrocercus urophasianus

#### Other Names

Other common names for the greater sagegrouse include: sage chicken, sage hen, sage fowl, sage cock, heath cock, and heath hen.

## Description

Greater sage-grouse are chicken-like birds. The greater sage-grouse is the largest of the North American grouse species. Adult males range in size from 26-30 inches in length and may be as much as two feet tall, weighing between four to seven pounds. Adult females range in length from 19-23 inches, weighing from two to four pounds. Males are more colorful than females, with a black throat and bib (the female's throat is predominantly gray and white), and white feathers forming a ruff around the neck and upper belly. In addition, males have two bright yellow air sacs on the breast that can be seen

when strutting and inflate during courtship (females lack air sacs). Both sexes have dark grayish-brown backs with many small gray and white speckles, and a black belly. The female's pointed tail is not nearly as long as the male's.

#### Distribution

Greater sage-grouse are currently found in 11 States: California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. They also occur in the Canadian provinces of Alberta and Saskatchewan.

#### Habitat

Greater sage-grouse are native to the sagebrush steppe of western North America. distribution closely follows that of sagebrush, particularly big sagebrush (Artemesia tridentata subspecies). The birds rely on sagebrush for roosting, cover, and food. They are usually referred to as "sagebrush obligates," meaning that the birds can not survive without sagebrush. Greater sage-grouse are found at elevations ranging from 4,000 to over 9,000 feet. Populations of sage-grouse may have distinct seasonal habitats or well-integrated seasonal habitats, depending upon if they are migratory or non-migratory populations. Sage-grouse require different habitats for breeding, nesting, broodrearing, and winter. In general, breeding occurs in open areas surrounded by sagebrush. For nesting, sage-grouse use areas of sagebrush with a canopy cover of 15-25% but can be as high as 30-40%, and a grass and forbs understory. For brood-rearing habitat, open stands of sagebrush (10-25% canopy cover) are preferable. Winter habitat consists of sagebrush areas with canopy cover of 10-30 percent.

#### Diet

The greater sage-grouse is omnivorous, eating both soft plants and insects. The birds lack a strong gizzard, therefore, their diet consists mainly of soft foods. Chicks about one week old consume mostly insects (about 60% of diet). High protein insects are critical to the diet of chicks in their first month of life. Ants and beetles are an important component of early brood rearing habitat. However, as the bird ages its diet shifts from insectivorous to herbivorous. Adults eat mostly a variety of forbs during the summer and early fall. Broods move to areas of free water or more succulent vegetation in late summer and fall. Sage-grouse are not adapted to digest seeds, so they do not eat wheat, corn, or other agricultural grains. During the winter, more than 99 percent of the diet consists of sagebrush leaves and buds.

## Reproduction

Breeding season occurs during the spring. At this time male sage-grouse perform courtship displays on breeding display areas called "leks." These areas are usually open sites surrounded by sagebrush cover. After mating, the female will build a nest near the lek. Grass and forbs under the canopy of sagebrush provide materials for nesting and cover. Sage-grouse hens lay about 7-9 eggs, have an incubation time of 25-27 days, and raise one brood per season. Chicks begin to fly at about 2-3 weeks of age. Mothers will remain with their young until fall. At that time they segregate sexually into winter flocks. Annual sage-grouse mortality is 50-55% for males, but only 30-40% for females. The life span of the greater sage-grouse is 1-4 years.

## **Unique Behaviors**

During breeding, males will fan their tail, and tilt it forward. They will inflate the air sacs on their chest and make plopping sounds as air is released. This performance is done to attract females.

#### **Conservation Status**

Current reports on the greater sage-grouse estimate its population at 142,000 to 500,000. Population declines have slowed down to 0.4% annually as compared to 3.5% reported during the period 1965-1985. Federal and state agencies in cooperation with private land owners and other partners are working together to conserve and restore greater sage-grouse habitat.

#### More Information

Further information about the greater sagegrouse and its current status can be found at the US Fish and Wildlife Service website:

http://mountain-prairie.fws.gov/species/birds/sagegrouse

## Prepared by:

Manuel Rosales, Conservation Agronomist USDA NRCS Plant Materials Center Meeker, Colorado

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