



National Greater Sage-Grouse Planning Strategy



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Sage-Grouse Biology and Habitat

Greater sage-grouse stand up to 2 feet tall and weigh between 2 and 7 pounds. Females (hens) are smaller and mottled brown, black and white. Males are more colorful and have spiked tails and large white ruffs around their necks.

In spring, males and females congregate on *leks* – large, open flats surrounded by sagebrush – to breed. Males strut with tail feathers fanned, swishing their wings, and inflating the bright yellow air sacs on their chests with rhythmic huffing that can be heard from a mile away. Individual birds often use the same lek year after year.

After mating, hens fly 4 to 15 miles from the lek to nest and rear their broods. Research shows that hens nest within the same area every year. When sage-grouse return to find a familiar lek or nesting area disturbed, they show little ability to adapt to the changes or to find substitute habitat.

Unique Among Game Birds

Sage-grouse have several characteristics that make them unique compared to other game birds. Unlike other game birds, sage-grouse have thin-walled, non-muscular gizzards to break down food. As a result, they cannot grind and digest tough foods such as grain and seeds and thus rely on soft sagebrush leaves for food. Sage-grouse spend long winters sheltering under mature sagebrush stands and more than 98% of their winter diet is sagebrush leaves. In addition, sage-grouse are vulnerable to changes in their habitat, because they are relatively long-lived (3-7 years) when compared to other upland game birds (1-2 years), and lay fewer eggs 7-9 eggs than their counterparts (12-14 eggs). The result is a species that is quick to decline after disturbance, yet slow to recover because of lower productivity.

Sagebrush Restoration

The life-history of sagebrush mirrors that of the sage-grouse in a way that makes habitat restoration and mitigation challenging: the plant also seems to recover slowly from change. Research shows that it takes 25 to 75 years or more for mountain sagebrush to recover to pre-disturbance condition. Wyoming big sagebrush recovers even more slowly – in the range of 50 to 120 years.