

A bird of disappearing landscapes

Sharp-tailed Grouse



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Description

The sharp-tailed grouse (*Tympanuchus phasianellus*) is one of ten species of North American grouse. Sharp-tailed grouse historically inhabited a broad range, covering much of central and northern North America. Within this range they occupied expansive habitat types that are dominated by grasses and shrubs.

The sharp-tailed grouse is characterized by a round body and short legs, short rounded wings and elongated central tail feathers, which is how it gets the name “sharptail.” Sharptails are mottled in appearance, with a mosaic of white, buff, brown, and black that provides good camouflage.

The main difference between the sexes is the pinkish to pale violet patches of bare skin on each side of the male’s neck. These patches, along with the headcombs, are expanded during the male’s courtship display, or “dance,” which they are famous for. During the dance the male holds his tail erect, wings outstretched, and head forward as he steps rapidly in an arc. Males compete for hens on dancing grounds.



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History

Sharp-tailed grouse habitat varies by season but typically includes grasslands, brush prairie, pine and oak barrens, oak savannas, sedge meadows, and shrub marshes. Dense herbaceous cover and shrubs are important habitat components. Disturbance events such as fire maintain these habitats, and historically sharp-tailed grouse populations expanded and contracted in response.

Sharp-tailed grouse was once found statewide. Prior to European settlement, sharp-tailed grouse had ample habitat. Open habitat types in the 1800s was much more widespread, and it is estimated that 13.2% of northern Wisconsin would have been open habitats.

Recently, however, lack of large scale disturbances that renew sharptail habitat have caused the population to decline. Much of the original pine and oak barrens found throughout Wisconsin have grown to mature forests. Grasslands, savanna habitats, and sedge meadows have also largely been lost to conversion and lack of fire disturbance. Estimates of habitat loss indicate that less than 1% of the original pine and oak barrens remain, less than 1% of original native grasslands and approximately 3% of moderate to high quality sedge meadow habitat remain. Fragmented habitats are also a problem since sharp-tailed grouse need large spaces and remaining habitat can become too small to support them.

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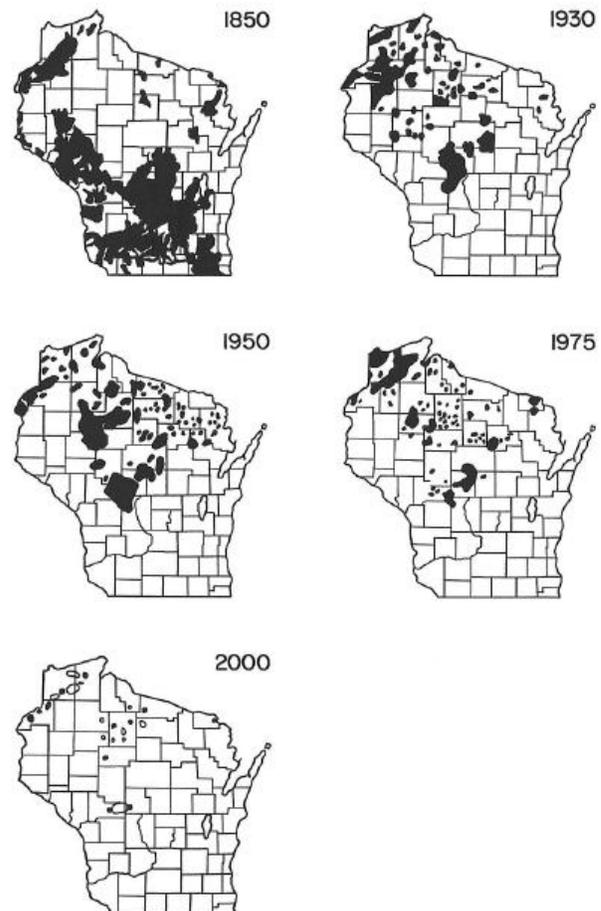


Figure 2. Distribution of sharp-tailed grouse in Wisconsin from 1850-2000.

Management

Sharp-tailed grouse in Wisconsin exist primarily on a core group of managed public properties and scattered private lands. In 2014 surveys of dancing males found 184 male sharptails on 8 core management areas.

Sharp-tailed grouse management in Wisconsin is typically a combination of prescribed burning, timber harvest and mowing, or other mechanical manipulations. Currently, most managed properties are primarily maintained by repeated prescribed burns. Burning is used to control woody vegetation, maintaining an open landscape beneficial to sharp-tailed grouse and other rare species that require this habitat. Depending on fire intensity and weather patterns, fires can create a mosaic of burned and unburned areas. Coarse woody debris, unburned “islands” of habitat, snag trees, and increased diversity of understory vegetation are beneficial outcomes of a wildfire regime, and have been shown to benefit sharp-tailed grouse and many other species. Even common species such as deer and turkey can benefit from these open habitats.

Sharp-tailed grouse are considered area-sensitive, which means they require large open blocks of habitat to support viable populations. In addition sharptail populations have become isolated, and need patches of open habitat to move between the managed properties. Movement between these large tracts of suitable habitat, which act as core areas, is likely necessary to maintain overall population size and prevent inbreeding.

The Northwest Sands Corridor Plan was created to identify opportunities to create habitat corridors or “stepping stones” between existing pine barrens habitat patches. This habitat corridor plan is built around the habitat needs and configuration of sharp-tailed grouse. Because of their need for large blocks of habitat, focusing a habitat corridor model on the needs of sharp-tailed grouse should also provide suitable habitat for most other species of special concern that rely on the same habitat.

Prescribed burning is a common management strategy to maintain and create sharptail habitat (top). While a recently burned area may seem barren (middle), plants will regrow and soon flourish (bottom).



Current sharp-tailed grouse management and survey efforts occur primarily on a core set of managed properties that have known, current or historically active dancing grounds.

Core properties currently include:

- Crex Meadows Wildlife Area
- Douglas County Wildlife Area
- Kimberly Clark Wildlife Area
- Moquah Barrens Wildlife Management Area
- Namekagon Barrens Wildlife Area
- Pershing Wildlife Area
- Riley Lake Wildlife Management Area
- The Barnes Barrens, Bayfield County Forest



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Looking to the Future

Sharp-tailed grouse habitat is largely dependent on disturbance to maintain an open landscape and appropriate vegetative cover. As an area-sensitive species, habitat management for sharp-tailed grouse also requires a landscape-scale perspective by which large tracts of open land are maintained. Given that there are multiple landowners across the landscape, there is a significant challenge in managing for sharp-tailed grouse habitat on the landscape scale.

There has also been increasing pressure to convert agricultural land to housing and other human development. In approaching sharp-tailed grouse management it becomes evident that management and protection of private lands is imperative. Habitat protection will require consideration of both existing and potential sharp-tailed grouse habitat, and involve strong partnerships with multiple partners and private landowners to accomplish a thriving sharp-tail grouse population in Wisconsin.

For more information on sharp-tailed grouse and their habitat please visit the DNR website: dnr.wi.gov.

Partners in Sharp-tailed grouse habitat :

- Wisconsin Sharp-tailed grouse Society
- Friends of the Namekagon Barrons Wildlife Area
- Friends of Crex
- Friends of the Bird Sanctuary
- Chequamegon-Nicolet National Forest

Sources:

- Fandel, S. G., and S. Hull. 2011. Wisconsin Sharp-tailed Grouse: a comprehensive management and conservation strategy. Wisconsin Department of Natural Resources.
- Reetz, M., et al. 2012. Northwest Sands Habitat Corridor Plan. Wisconsin Department of Natural Resources.
- Wise, S. 1986. The Sharp-tailed Grouse: (*Tympanachus phasianellus*). Wisconsin Department of Natural Resources.

