

MANAGEMENT CHALLENGES AND OPPORTUNITIES RELATED TO PRAIRIE GROUSE; A PICTORIAL OVERVIEW

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ABSTRACT

Grouse species occupying the Great Plains and associated habitats include greater sage-grouse (*Centrocercus urophasianus*), Gunnison sage-grouse (*C. minimus*), greater prairie-chicken (*Tympanuchus cupido pinnatus*), lesser prairie-chicken (*T. pallidicinctus*), and sharp-tailed grouse (*T. phasianellus*). All of these species have experienced significant declines in numbers during the last half century. The heath hen (*T. cupido cupido*) and Attwater's prairie-chicken (*T. cupido attwateri*) are extinct and almost extinct, respectively.

Management challenges and opportunities associated with plains grouse declines and potential recoveries are myriad and include but are not limited to various facets of livestock management, farming activities, farm conservation programs, use of fire, habitat fragmentation, predation, harvest, road management, power lines, towers, fences, resource extraction to include wind power, forestry practices, habitat conversion, mowing, chemical use, noxious weeds, hydrology, development, recreation, habitat acquisition, and easements.

The North American Grouse Management Plan considers these challenges, and this presentation provides pictorial understanding of many of the problems involved as well as a brief discussion of associated impacts. Rather than an *Exxon Valdez* or Mount St. Helens type of catastrophic destruction, habitat in the Great Plains is being slowly chipped away, piece by piece, with little planning or regulation. In many cases, multiple factors combine as threats to synergistically impact grouse survival. There are many fire-related categories such as the brush-control problems in South Texas where we are trying to reintroduce Attwater's prairie-chicken. Fire could solve this problem, but there is great reluctance to use it. A similar situation exists with sharp-tailed grouse where forest-succession problems in the north country can completely eliminate once suitable sharp-tailed grouse habitat unless fire or mechanical tree removal is utilized. Again, there is a reluctance to use fire due to perceived danger. Fire is only one aspect in the revival of grasslands, but an important one. As with numerous other management concerns—opportunities, fire is essential for management that results in healthy habitats. Yet too much or too little, both spatially and temporally, can result in a decidedly negative impact for management of grouse of the plains.

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