



IN DEFENSE OF SAGE-GROUSE HUNTING IN NEVADA

Sage-grouse hunting provides a traditional recreation opportunity that is considered an appropriate use of wildlife resources when managed correctly. One of the goals of all State Wildlife Agencies is to manage for healthy populations of game fish and terrestrial game species. These programs are obviously considered successful when they support fishable and huntable populations of game species. Additionally, an underlying premise for State Wildlife Agencies to consider, especially for upland game populations, is whether or not hunter harvest is compensatory or additive in relation to natural sources of mortality. Under the appropriate management framework, mortality from sage-grouse hunting is considered compensatory to natural sources rather than additive. In other words, the take from hunting would be deemed additive when it contributes to a population decline by killing individuals above and beyond that which would have died from natural causes such as predation. It is the goal of the Nevada Department of Wildlife (NDOW) to avoid hunter induced mortality that would be additive to natural causes.

In 2010, the U.S. Fish and Wildlife Service identified habitat fragmentation, loss of habitat and the lack of regulatory mechanisms as key threats to the future of our sage-grouse resources. The "lack of regulatory mechanisms" refers to existing measures put in place to conserve the species habitat. Sage-grouse, as their name implies, depend upon sagebrush communities and the overall health of these sagebrush contributes to their productivity and survival. They are considered a landscape scale species, meaning that they need large areas to carry out their life cycle processes as they move from one seasonal habitat to another. There is no question that the amount of suitable sage-grouse habitat in Nevada has decreased over the last few decades, mainly due to major wildfires.

NDOW scrutinizes sage-grouse hunting seasons and is conservative when it comes to recommending season length and bag limits for the species. NDOW follows guidelines established by the Western Association of Fish and Wildlife Agencies (WAFWA) that suggest hunter harvest should not exceed 10% of the estimated fall population and populations should not be hunted where less than 300 individuals comprise the breeding population. Since 2004, the statewide harvest of sage-grouse during the hunting season has been between 2% and 6% of the estimated fall population annually. NDOW has closed sage-grouse seasons in five counties including 23 separate hunt units since 1997. Additionally, the WAFWA guidelines suggest that sage-grouse seasons be relatively short (1-4 week season) with a low bag limit (1-2 birds per day). The season in Nevada has generally fluctuated between 10 to 15 days for most areas and the bag limit has remained at 2 per day and 4 birds in possession.



Aside from the aforementioned guidelines, NDOW relies on research projects conducted in Nevada that shed light on hunting mortality. For example, a long-term research project in Eureka County being conducted by the University of Nevada, Reno on the effects of a utility scale transmission line on sage-grouse population dynamics has determined that the total female mortality associated with hunting was 2.2% over the course of three years. In a separate study conducted in the Montana Mountains of Humboldt County, Sedinger et al. (2010) found no support for an additive effect of hunter harvest on survival. These results suggest that the effect of hunter harvest is very small.

An ancillary benefit of the hunting season is that it allows NDOW an opportunity to collect important population demographic data. Each year, NDOW collects wings from hunter harvested birds. Data collected from these wings are used to help estimate fall population size in specific areas. Closer examination of wings classified as adult hens also allows NDOW to determine whether or not the bird nested successfully (hatched eggs) during the previous breeding season, which can help determine population health and formulate future management recommendations.

Additionally, hunting creates a constituency of sage-grouse advocates who are interested in seeing that the needs of sage-grouse populations are met. Westerners are generally supportive of the multiple-use management philosophy on public lands. Regulated hunting, as recommended by state and local conservation plans, is a sustainable multiple-use activity (Christiansen 2008). A primary benefit of sage-grouse hunting is that NDOW is able to utilize hunting license sales as match for Pittman-Robertson Wildlife Restoration Act (PR) federal-aid dollars. For the 10-year period from 2003-2012, sportsman's dollars have allowed NDOW to access \$4.7 million (\$3.53 million federal dollars and \$1.18 million state share). This funding allows NDOW to monitor populations through lek counts, wing collection and radio-marking investigations, conduct habitat improvement and restoration projects (including wildfire rehabilitation), and conduct research to improve management strategies for the species and better understand factors that may be limiting populations. All activities associated with this funding are reported annually in a Job Progress Report format and are available on the NDOW website located at <http://www.ndow.org/wild/conservation/sg>.