

Hunting and Sage-Grouse:

A Technical Review of Harvest Management On a Species of Concern in Wyoming

Executive Summary



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Some individuals and organizations in Wyoming continue to express concerns about the potential impacts of hunting on greater sage-grouse, a species of management concern and the subject of petitions for listing under the Endangered Species Act. These concerns continue in spite of: 1) increasingly conservative sage-grouse hunting seasons implemented over the last 15 years; 2) the U.S. Fish and Wildlife Service (USFWS) listing process that ranked hunting 17th of 19 potential threats to the species; 3) hunting seasons that are well within the peer-reviewed guidelines for the management of greater sage-grouse and the recommendations of the Wyoming state and local sage-grouse conservation plans; and 4) generally increasing sage-grouse populations across large landscapes in Wyoming where anthropogenic impacts are limited.

Changes made to hunting seasons in 1995 significantly reduced hunter participation and sage-grouse harvest rates in Wyoming. *This fact is not well understood by many in Wyoming.* The public-at-large and others were not concerned because greater sage-grouse had not been petitioned for listing under the Endangered Species Act. The fact that the changes were made pro-actively prior to the widespread concern for sage-grouse has led to a perception that WGFD has not responded to the concerns by closing hunting seasons or otherwise minimizing harvest effects. In addition to the changes made in 1995, more recent examples of increasingly restrictive hunting seasons include: 1) hunting season closures established in 2000 for NW and SE Wyoming, 2) shortened seasons with reduced bag limits in 2002, 3) emergency closure of three counties in 2003 due to a West Nile virus outbreak, 4) expansion of the SE Wyoming closure in 2007, and 5) additional restrictions recommended for 2008.

The USFWS examined the effects of hunting on greater sage-grouse in their status review of the species. In its January 2005 finding on whether or not to list the species as threatened or endangered under the Endangered Species Act, the USFWS determined that hunting as currently regulated by state wildlife agencies was not a significant threat to the conservation of sage-grouse. The expert panel used by the USFWS to make this determination ranked hunting 17th out of 19 potential threats. In the attached letter dated January 30, 2008, the USFWS states, "We are not aware of any new information that would change the results of that analysis," and, "it would not be necessary or appropriate to apply the PECE (Policy for Evaluation of Conservation Efforts When Making Listing Decisions) framework to conservation actions related to hunting that have already been demonstrated to be effective and do not threaten the species."

Harvest of greater sage-grouse currently occurs in 10 of the 11 states in which they reside. Additionally, Wyoming boasts the largest and most widespread populations of grouse of any of the states. Sage-grouse hunting has generally become more conservative in recent decades in response to generally declining sage-grouse populations over the last half-century.

Harvest of greater sage-grouse provides population data not easily obtained except through costly radio-telemetry studies of specific populations. Wings from hunter-harvested birds are used to determine the ratio of hens to chicks, which provides an index to annual chick

production. In conjunction with population trend counts, these data contribute to understanding the dynamics of sage-grouse populations.

Hunting creates a constituency of sage-grouse advocates who are interested in seeing the needs of grouse populations are met and license fees provide revenue for management. Wyomingites are generally supportive of a multiple-use management philosophy on public lands. Regulated hunting, as recommended by state and local conservation plans, is a sustainable multiple-use activity similar to well-managed grazing and energy development. Eliminating hunting would also eliminate an ally in the effort to prevent the need for listing under the Endangered Species Act.

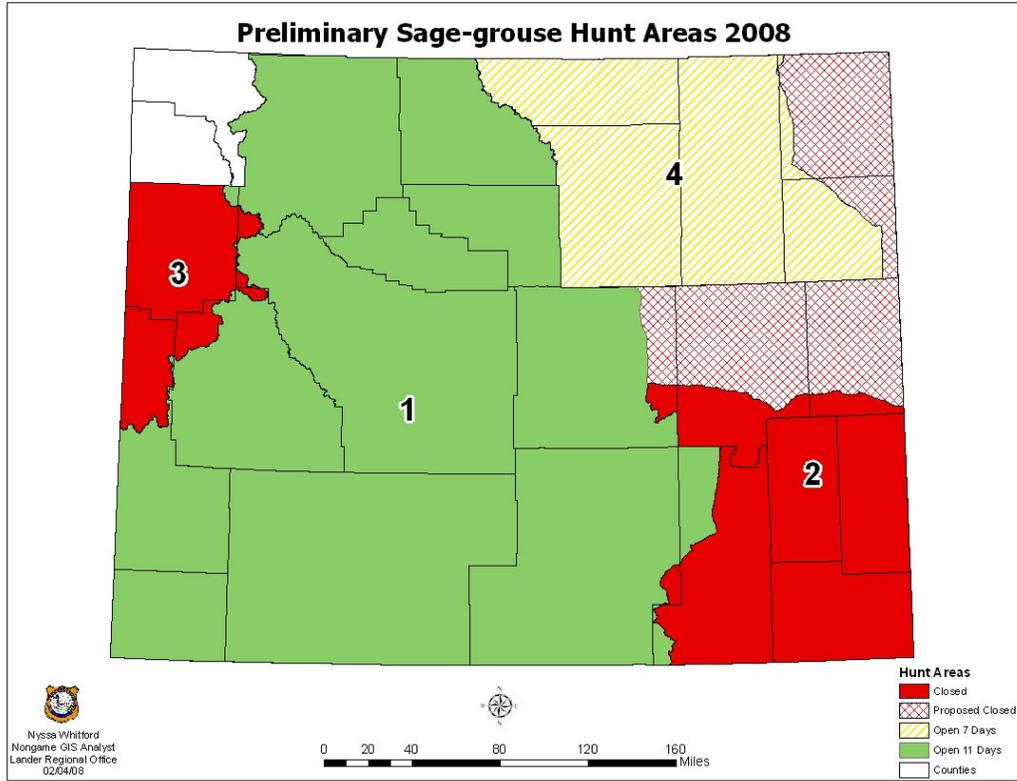
No studies have demonstrated that hunting is a primary cause of reduced numbers of greater sage-grouse. However, sage-grouse are a relatively long-lived species where survival outweighs reproductive output. This strategy is contrary to most upland and small game species where long life and survival are sacrificed for high reproductive output. Sage-grouse demonstrate high over-winter survival, which limits the applicability of the concept of compensatory mortality with regard to hunter harvest. Therefore, the biology of sage-grouse suggests conservative harvest management practices should be implemented compared to harvest strategies for species such as pheasants or partridges.

Sage-grouse populations have declined in Wyoming and across the West over the last half-century. Over the last decade however, the average number of males at leks has increased in Wyoming reflecting a generally increasing population. The same is true for the most recent three-year period. Sub-populations more heavily influenced by anthropogenic impacts (subdivisions, intensive energy development, large-scale conversion of habitat from sagebrush to grassland or agriculture, Interstate highways, etc.) have experienced declining populations or extirpation.

Recommendations for 2008 include: 1) close an additional 5.9 million acres in northeast Wyoming that do not meet the population thresholds identified in Wyoming conservation plans and management guidelines, 2) reduce season length in northeast Wyoming open for hunting, 3) approve a hunting season of September 20-30 with a daily/possession limit of 2/4 in areas not identified in items 1-3 above, and 4) close falconry season on January 31 rather than March 1.

These sage-grouse hunting recommendations take into account biology, formal public involvement via state and local planning efforts, and informal public perceptions. Consequences of varying greatly from these recommendations, e.g. closing large areas not supported by existing plans, could undermine local sage-grouse conservation efforts in Wyoming. Severely restricting or closing hunting seasons could create a public perception that sage-grouse populations in Wyoming may indeed require protection under the Endangered Species Act. Conversely, not recognizing real, but biologically unfounded, concerns about hunting impacts could threaten voluntary industry-led conservation initiatives and/or generate resistance to comply with federal land use stipulations/regulations. Efforts to inform all stakeholders of the issues associated with sage-grouse hunting should be increased in addition to continuing generally conservative sage-grouse hunting seasons.

Preliminary recommendations for 2008 Wyoming sage-grouse hunting seasons.



Area	Season Dates	Daily/Poss. Limits	Falconry
1	Sept. 20-Sept. 30	2/4	Sept. 1-Jan. 31
2, 3	Closed	Closed	Closed
4	Sept. 20-Sept. 26	2/4	Sept. 1-Jan. 31



United States Department of the Interior

FISH AND WILDLIFE SERVICE

**Ecological Services
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Cheyenne, Wyoming 82009**

In Reply Refer To:
ES-61411/W.39/WY10520

JAN 30 2008

Mr. Tom Christiansen
Wyoming Game and Fish Department
351 Astle
Green River, WY 82935

Dear Mr. Christiansen:

Thank you for your electronic mail request of January 22, 2008, regarding the U.S. Fish and Wildlife Service's (Service) "position" on the role of hunting relative to a determination on whether or not to list the Greater sage-grouse under the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 et seq., Section 4(b)(3)(B)).

While the Service does not have a formal position on this issue, we did examine the effects of hunting on greater sage-grouse in our status review of the species. In our January 12, 2005 finding (70 FR 2244) on whether or not to list the species as threatened or endangered under the Act, we determined that hunting as currently regulated by state wildlife agencies was not a significant threat to the conservation of the greater sage-grouse. We based this determination on the best scientific and commercial information that showed that hunting was (a) occurring within a limited timeframe when productivity to the species was unlikely to be affected and (b) highly regulated and could be quickly adjusted to meet the needs of the species. We are not aware of any new information that would change the results of that analysis.

You had specifically asked whether Wyoming's sage-grouse hunting regulations would meet the Service's Policy for Evaluation of Conservation Efforts When making Listing Decisions (PECE; 68 FR 15100). PECE provides a framework to evaluate conservation efforts by State and local governments and other entities that have been planned but have not been implemented, or have been implemented, but have not been demonstrated effective at reducing a threat to a species. This policy allows the Service to determine if such conservation actions will reduce a threat to a species to the extent that listing will not be necessary. Since hunting was not considered a threat to the species at the time of the 2005 finding, the effectiveness of those regulatory measures had been demonstrated and PECE would not have been applicable.

Your correspondence also asked whether the complete cessation of hunting, would meet the PECE framework. Again, PECE is only applicable to identified threats to the continued survival of a species. It would not be necessary or appropriate to apply the PECE framework to

conservation actions related to hunting that have already been demonstrated to be effective and do not threaten the species.

We appreciate your efforts to ensure the conservation of the Greater sage-grouse. If you have further questions regarding this letter or any listing questions, please contact Pat Deibert of my staff at the letterhead address or at (307) 772-2374, ext. 226.

Sincerely,

A handwritten signature in black ink, appearing to read "B. T. Kelly". The signature is fluid and cursive, with the first name "Brian" and last name "Kelly" clearly distinguishable.

Brian T. Kelly
Field Supervisor
Wyoming Field Office