

WYOMING CHAPTER - THE WILDLIFE SOCIETY

The mission of The Wildlife Society is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation. Learn more at: http://wildlife.org/wyoming-chapter~/

February 21, 2017

RE: House Bill No. HB271, "Game Bird Farms - Greater Sage Grouse"

Dear Wyoming Senators,

On behalf of The Wyoming Chapter of the Wildlife Society (WY-TWS) and the WY-TWS Science Committee, please find the following comments on House Bill No. 271. The Wildlife Society is an international organization committed to addressing national and international issues that affect the current and future status of wildlife in North America and throughout the world. The WY-TWS, overseen by a voluntary executive board, is comprised of wildlife professionals who collectively promote awareness of and continued improvement in science-based wildlife management.

The merit of HB271, as currently written and conceived for consideration by the Senate Members of the 64th Wyoming Legislature, is not supported by the peer-reviewed scientific literature on multiple fronts. Recent work in Colorado investigated approaches to successfully augmenting sage-grouse populations through captive rearing, and none of the lessons learned from this research are included in the approach proposed in this bill. The literature on the captive rearing of other bird species with life-history characteristics similar to sage-grouse is substantial and was likewise not referenced. Sage-grouse are a unique gallinaceous bird in North America in that they are a long-lived species with relatively low annual reproductive output. The removal of up to 1000 eggs annually from wild populations combined with the introduced disturbance necessary to find that many eggs will likely directly impact target populations negatively. Further, sage-grouse chicks imprint on the landscape in which they were reared (as evidenced by generational fidelity to seasonal ranges), and the hard release of captive-reared individuals into wild populations will not result in long-term population increases, as evidenced in the sage-grouse relocation/transplant literature.

Therefore, the combined effects of collecting eggs and releasing chicks, as described in HB271 and amended by the recent Senate Committee, have a high likelihood of resulting in a net negative for sage-grouse populations in Wyoming. Finally, and possibly most importantly, Greater sage-grouse populations in Wyoming are nowhere near to the level requiring a captive rearing program—this conclusion being supported by the population trend data collected annually by the State as well as a tremendous body of literature. The literature unequivocally indicates that effective management of sage-grouse results from a focus on protecting and enhancing sagebrush habitats as the State of Wyoming has implemented through their Sage-grouse Core Area Management program (WY Executive Order 2015-4).

We have elaborated on the most obvious issues to HB271, but the potential for long-term negative genetic implications, disease transfer and proliferation, impacts to behavioral adaptations, etc. of a captive rearing program are real and extensively reported in the literature. In addition, since 2000 there have been two statewide and eight local citizen-based sage-grouse working groups established by the State. These groups have developed plans and implemented conservation actions on behalf of sage-grouse, all within a multiple-use framework. None of these groups has identified the need for captive-rearing. To the contrary, several local sage-grouse working groups voiced formal objections to the concept of rearing

sage-grouse in captivity when it was last seriously considered in 2008. HB271 disregards the work of the citizens tasked by the State to conserve sage-grouse in Wyoming's working landscapes.

Beyond the citations listed below, we can provide additional pertinent peer-reviewed literature and records supporting our positions as established above if necessary.

In conclusion, the scientific literature does not support captive rearing of Greater sage-grouse as proposed in HB271, and accordingly, we cannot support HB271. If in the future it should become necessary to consider captive rearing of Greater sage-grouse as a conservation tool, the scientifically-rigorous information and expertise exists to develop an approach that has a relatively decent chance of succeeding; HB271 as currently drafted does not provide that approach.

Respectfully,

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Select Literature:

- Apa, A. D., T. R. Thompson, K. P. Reese, and K. M. Tadvick. 2010. Greater sage-grouse (*Centrocercus urophasianus*) captive-rearing protocols: egg collection, hatch, husbandry, and release through 9 days of age. Technical Manual. Colorado Division of Wildlife, Fort Collins, CO.
- Apa, A. D., and L. A. Wiechman. 2015. Captive-rearing of Gunnison sage-grouse from egg collection to adulthood to foster proactive conservation and recovery of a conservation-reliant species. Zoo Biology 34:438-452. doi:10.1002/zoo.21228
- Apa, A. D., and L. A. Wiechman. 2016. Captive-breeding of captive and wild-reared Gunnison sage-grouse. Zoo Biology 35:70-75. doi:10.1002/zoo.21253
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- Knick, S. T. and J. W. Connelly (editors). 2011. Greater sage-grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology (vol. 38), University of California Press, Berkeley, CA, USA.
- Manier, D. J., D. J. A. Wood, Z. H. Bowen, R. M. Donovan, M. J. Holloran, L. M. Juliusson, K. S. Mayne, S. J. Oyler-McCance, F. R. Quamen, D. J. Saher, and A. J. Titolo. 2013. Summary of science, activities, programs, and policies that influence the rangewide conservation of Greater Sage-Grouse (*Centrocercus urophasianus*). U.S. Geological Survey Open-File Report 2013-1098. http://pubs.usgs.gov/of/2013/1098/.
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