WYOMING CHAPTER – THE WILDLIFE SOCIETY

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March 2, 2017

RE: Enrolled Act 91 - House Bill No. HB271, "Game Bird Farms – Greater Sage Grouse"

Dear Governor Mead,

On behalf of The Wyoming Chapter of the Wildlife Society, please find the following comments on what was originally, HB 271 - Game bird farms-greater sage grouse and is now Enrolled Act 91 (EA 91).

Founded in 1937, 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 Wyoming Chapter of The Wildlife Society (WY-TWS), one of 55 chapters within the larger organization, is overseen by a voluntary executive board. The WY-TWS is comprised of 200 wildlife professionals across Wyoming who are deeply interested in the outcome of EA 91 and want to ensure that the science on captive rearing of sage-grouse is fairly and accurately interpreted and understood.

There is a tremendous amount of scientific peer-reviewed research on Greater Sage-grouse, much of which was conducted in Wyoming and published by our members. It is from this knowledge base that Wyoming has been a leader in sage-grouse management. **Based on our collective biological expertise, we believe that EA 91 is <u>not</u> supported by the peer-reviewed scientific literature on multiple fronts and share the following science for you to consider as you weigh your decision to sign or veto EA 91:**

- Collection of wild eggs is likely to directly negatively impact local populations due to disturbance/risk of mortality to hens and removal of individuals from the population (influencing gene flow and fitness-related traits). In the event that a permit is granted, we would ask for stringent regulations to ensure that these impacts are minimized and carefully monitored by Wyoming Game and Fish Department, and that the risks are diluted across multiple local and healthy populations.

- Apa and Wiechman (2015, 2016) found that "mortality of wild adults introduced into captivity was problematic" (6 of 7 died and one was returned to the wild)." Apa and Weichman (2015) state that: "Snyder et al. (1996) expressed concerns about captive-breeding programs, suggesting that captive-breeding efforts should be used sparingly with a limited number of endangered species recovery programs and used a last resort when other conservation alternatives are unavailable or have been exhausted." In fact, Apa and Wiechman state in their journal article (2016) and that because of the challenges encountered, they *"do NOT recommend captive brood-rearing as a viable husbandry technique"* for Gunnison sage-grouse at this time (which have similar life history characteristics as Greater Sage-grouse).

- Lastly, concerning game farm management, Apa and Wiechman (2016) state: *"We do not recommend that captive-rearing efforts be outsourced to outside entities [Hernandez et al., 2006:628],"* similar to what is proposed and intended by EA 91, "but those responsible for

such efforts work with GUSG [Gunnison sage-grouse] captive-rearing experts to develop a thoughtful, well-planned, collaborative comprehensive recovery plan with clear and measurable objectives."

Based on the above, and captive-rearing work conducted by the Colorado Division of Wildlife (Apa et al. 2010) on Greater Sage-grouse, we remain concerned that this endeavor could result in net negative impacts to local sage-grouse populations – further adding threats to these populations.

Finally, wildlife management in North America is the envy of the world because of the forward thinking principles contained within the North American Wildlife Conservation Model. One of the most important principles is that sound science and proper application of scientific information is used for wildlife management. From a scientific standpoint, we are not totally opposed to captive rearing as a potential future means to augment populations. **However, a successful captive-rearing program for sage-grouse requires far more research and planning than is suggested by EA 91 and unless suitable habitat for grouse is available for birds after release, game farm sage-grouse will not result in any meaningful long-term benefits for the conservation of the species.**

Should EA 91 be enacted, we strongly encourage you to direct the Wyoming Game and Fish Commission to work closely with the state's leading sage-grouse biologists (many of whom are WY-TWS members) and sage-grouse captive-rearing experts from other states (of which there are only a few), to develop specifications for carrying out the policy that minimizes risk to sage-grouse populations as much as possible. Given the logistical and biological challenges associated with captive-breeding of sage-grouse, a thoughtful and science-based plan will also maximize efficient use of financial resources. We look forward to communicating with the Commission as the rules are drafted between now and September, and encourage there to be adequate time provided for careful consideration and public involvement.

In closing, we are grateful for your stewardship of our state's natural resources and especially for your leadership on sage-grouse conservation and management, which continues to be a regional example. Thank you for your thought and attention to this matter.

Sincerely,

Holly Copeland
President, Wyoming Chapter of The Wildlife Society

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

Holloran, M. J., R. C. Kaiser, and W. A. Hubert. 2010. Yearling greater sage-grouse response to energy development in Wyoming. Journal of Wildlife Management 74:65-72.

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/.

Reese, K. P., and J. W. Connelly. 1997. Translocation of sage grouse *Centrocercus urophasianus* in North America. Wildlife Biology 3:235-241.

Thompson, T. R. 2012. Dispersal ecology of Greater Sage-Grouse in northwestern Colorado: evidence from demographic and genetic methods. Dissertation, University of Idaho, Moscow, USA.

Thompson, T.R., A.D. Apa, K.P. Reese, and K.M. Tadvick. 2015. Captive rearing of sage-grouse for augmentation of surrogate wild broods: evidence for success. Journal of Wildlife Management 79(6):998-1013.