



WYOMING CHAPTER – THE WILDLIFE SOCIETY

Leaders in Wildlife Science, Management and Conservation

18 May 2020

Docket No. APHIS-2019-0018
Regulatory Analysis and Development, PPD
APHIS Station 3A-03.8
4700 River Road Unit 118
Riverdale, MD, 20737-1238

Submitted via Federal eRulemaking Portal

RE: Comments on reduction of *Brucella abortus* from current list of select agents

To whom it may concern:

On behalf of the Wyoming Chapter of The Wildlife Society (WY-TWS), please accept the following comments in regards to the potential to remove *Brucella abortus* from the current list of select agents and toxins. We appreciate the opportunity to lend our scientific expertise as part of the public comment period for this biennial review of all current select agents and toxins. We support the removal of *B. abortus* from the current list of select agents and toxins as it will further research and scientific opportunities to better understand the dynamics involved within and between wildlife, disease, and livestock.

Brucellosis, caused by *B. abortus*, is enzootic in elk (*Cervus elaphus*) and wild bison (*Bison bison*) of the Greater Yellowstone Ecosystem (GYE) in Wyoming. The disease causes pregnant females to abort following initial ingestion of the bacteria through contact with aborted materials. In the GYE of Wyoming, elk are considered the primary host and potential vector of transmission to livestock (primarily cattle, *Bos Taurus*). This is based on the species' life history and identification of genetic isolates of *B. abortus* from elk and reactor cattle. Although brucellosis has been known to infect elk on supplemental winter feedgrounds and the National Elk Refuge since the 1930s, and feedgrounds concentrate elk during a portion of the abortion period (February-June) thereby promoting transmission, free-ranging populations with limited interchange of elk attending feedgrounds appear to maintain the disease and have seen prevalence increase since the 1990s.

The impacts of brucellosis on the relative health of populations of elk and bison are limited. Despite prevalence estimates that average from 25% in elk to 66% in wild bison, these have translated to slight reductions in pregnancy rates, but have not resulted in reduction of elk productivity as population trend counts, hunting seasons, and harvest permits have been stable or increasing. Regardless, the disease is not native to North American wildlife, and spillover events to cattle have

increased over the past 20 years creating economic hardships for producers and maintaining debate over appropriate management actions to control the disease.

Options to control transmission of the disease have included spatio-temporal separation of wildlife and livestock (e.g., hazing), spatio-temporal manipulations of elk (e.g., habitat treatments, low-density feeding), test-and-slaughter, and vaccination. Although past studies of vaccination (including booster trials) have shown limited to no effect on reducing abortion rates or prevalence in captive or free-range populations, recent research with alternative vaccines and immunocontraceptives have shown promise. **However, the listing of *B. abortus* as a select agent has limited the opportunity for effective research field trials, particularly the ability to challenge test animals with live field strain *B. abortus*.**

Because of the interrelated factors and potential for increased research and science to better understand relationships between wild ungulates, domestic livestock, and *B. abortus*, we support the removal of *B. abortus* from the list of current select agents to further promote research and management actions to control the disease. Please do not hesitate to contact us if you have questions.

Sincerely,



Eric Maichak

President

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Dr. Dan Thompson

Science Committee Chair

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About WY-TWS and the Science Committee

The Wildlife Society is an international organization of wildlife professionals and students committed to addressing issues that affect the current and future status of wildlife in North America and the world through science-based decision making. WY-TWS is comprised of over 200 wildlife professionals in Wyoming who collectively promote awareness of and continued improvement in science-based wildlife management in Wyoming. Our Science Committee is made of professionals within WY-TWS who represent a diversity of backgrounds, experience, and expertise, all with a solid vision of maintaining the merits of science and the scientific method as it pertains to Wyoming's wildlife and wildlife habitats.