

To whom it may concern:

I am Paul Nicoletti, Emeritus Professor, College of Veterinary Medicine, University of Florida. My specialty in brucellosis began in 1960 that included a Master of Science degree, University of Wisconsin. For many years, I worked with the USDA in the epidemiology of brucellosis and served more than 4 years in the subject with the United Nations Food and Agriculture Organization in Iran. For the past 30 years, I have taught veterinary students at the University of Florida in microbiology, public health, and epidemiology. I have published over 60 articles in refereed journals and books on brucellosis. My curriculum vitae is attached.

I have been requested to render an opinion concerning transmission of brucellosis from bison to cattle, in particular the situation in the Horse Butte area west of Yellowstone National Park. While I have visited the area of West Yellowstone, I cannot claim extensive knowledge of it. Therefore, I must rely upon information provided to me, primarily maps and communications.

Brucellosis is a reproductive disease in cattle and bison whose major manifestation is abortion. While there is some disagreement about the severity of the disease in these animal species, it is clear that transmission under certain conditions between the species can occur. Nevertheless, there has been no evidence to date that bison have been the source of cattle brucellosis in the Yellowstone National Park area. Transmission occurs primarily via the oral route: a susceptible host ingests the bacteria from secretions and tissues of the newborn. Transmission ceases when the discharges cease. While long-term contamination of an area (grass, hay, etc.) is possible under certain ecological conditions, this is not a generally accepted problem. Cattle do not ingest putrefactive fetuses or placentae. In order for cattle to become infected from infected bison, there must be close contacts. It is my understanding that cattle are

no longer grazing in the Horse Butte area of concern, and scientific knowledge would suggest that transmission cannot occur: there is simply no susceptible cattle host.

I am happy to respond to questions concerning my expertise or the disease.



Paul Nicoletti