## HEMORRHAGIC DISEASE IN MONTANA

\*Neil Anderson, Montana Fish, Wildlife and Parks, 1400 South 19th Ave., Bozeman, MT 59718 Jennifer Ramsey, Montana Fish, Wildlife and Parks, 1400 South 19th Ave., Bozeman, MT 59718 Keri Carson, Montana Fish, Wildlife and Parks, 1400 South 19th Ave., Bozeman, MT 59718

Hemorrhagic Disease (HD) is caused by two groups of orbiviruses, bluetongue (BT) and epizootic hemorrhagic disease (EHD). Both BT and EHD are capable of causing large scale mortalities in white-tailed deer. Although both are capable of causing disease in other species, BT typically causes clinical symptoms and mortality in a larger range of species, including pronghorn and domestic sheep. Three subtypes of EHD and five subtypes of BT are known to exist in North America. Only EHD subtype 2 and BT subtype 17 have been identified in Montana. Both BT and EHD are transmitted by a biting midge and the onset of disease typically occurring in late summer/early fall with mortality cases decreasing rapidly after the first killing frost. HD was first documented in Montana in 1961. Montana Fish, Wildlife and Parks has participated in a national survey documenting HD occurrence since that time. Outbreaks within Montana appear to be becoming more frequent and the area affected has increased. Until 2013 HD had been limited to the east side of the Rocky Mountain front. However, in 2013 several counties in western Montana experience their first recorded EHD die-off in white-tailed deer. The history and potential future ramifications of HD outbreaks in MT are discussed.