**Wild Turkeys are Showing Blood Antibodies to Survive West Nile Virus Infection**

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- Outcomes of infection with West Nile virus (WNV), a mosquito-borne RNA virus, vary greatly among bird species.
- Greater sage-grouse and ruffed grouse are highly susceptible while wild turkeys are less susceptible based on experimental infection trials and documented natural mortalities. The susceptibility of the American woodcock remains poorly understood.
- To determine the percentage of individual game birds that survive infection, researchers at the Southeastern Cooperative Wildlife Disease Study, Department of Population Health at the University of Georgia sampled blood taken from either hunter-harvested or live wild ruffed grouse, wild turkeys, greater sage-grouse and American woodcock collected across the United States from 2018-2021 and looked for antibodies to WNV, which indicate survival from prior WNV infection.
- The highest percentage of individuals with antibodies to WNV were American woodcock (31%, 8 of 26 tested) and wild turkey (28%; 133 of 477 tested). 13% (359 of 2,805 tested) of ruffed grouse had antibodies to WNV. Antibodies were not detected in any of the greater sage-grouse samples (0 of 57 tested).
- Although these data should be interpreted in conjunction with susceptibility studies of each species and available WNV case/mosquito data from the respective sample collection regions, these results suggest that wild turkeys and woodcock may survive WNV infection at greater rates than the other species examined in this study.
- Wild turkey blood samples will be collected for a third year in 2021 to add to the overall sample analysis, which will consider both demographic and environmental factors of the birds and regions sampled.

(Summarized from an abstract submitted for a poster presentation at the *2021 Wildlife Disease Association International Conference*: Seroprevalence of West Nile virus in game bird populations in the United States, by Melanie R. Kunkel, Lisa Williams, Mary Jo Casalena, Mitchell Blake, Samantha E. Allen, Leslie Schreiber, David Moscicki, Christopher Moorman, Daniel G. Mead, Mark G. Ruder and Nicole M. Nemeth.)