

**Position Title:** PhD Assistantship: Spatial Epidemiology of West Nile Virus in Ruffed Grouse

Description: We are offering a PhD graduate student assistantship to start in the summer/fall 2018 in the Pennsylvania Cooperative Fish and Wildlife Research Unit in the Intercollege Graduate Degree Program in Ecology at The Pennsylvania State University. The position is fully funded by the Pennsylvania Game Commission for up to 4 years. This is a collaborative effort with PGC, DEP and several universities in Pennsylvania to assess species diversity of mosquitoes infected with West Nile Virus (WNV) in forested habitats within the state. Currently, efforts for mosquito sampling by DEP focus primary in urban/suburban areas but these efforts are lacking in traditional grouse habitat. Grouse have shown considerable population declines statewide with WNV considered a potential reason for this decline. This project will involve being the lead researcher in organizing fieldwork and compiling grouse population data, mosquito diversity and prevalence datasets, and spatial data layers in GIS from across the state and among collaborators. The student will incorporate these datasets to understand the long-term implications of this virus on ruffed grouse populations statewide using Bayesian hierarchical modeling.

Qualifications: Minimum of a MS degree in Wildlife and Fisheries Science or related field with background in spatial epidemiology and/or Bayesian analysis. Graduate research will primarily be data analysis and compilation with some fieldwork to oversee collection of mosquito samples and subsequent results of prevalence of mosquito pools for WNV by DEP. The most qualified applicants will have previous experience in disease modeling, a minimum of 2 manuscripts submitted or in press, and an interest in spatial epidemiology as it pertains to focused disease surveillance and impacts on populations. Interested applicants should submit the following items: 1) a C.V. with competitive GPA and GREs (unofficial transcripts are suitable), and also include contact information for 3 references and 2) a 1-2 page description of research interests and responses to qualifications. Applications should be submitted in a single file (pdf, Latex) by email to wdw12@psu.edu with the Subject line: PHD GRADUATE STUDENT ASSISTANTSHIP

Salary: Tuition and stipend of about \$26,141 per year that includes summer salary and benefits

Closing Date: 15 February 2018 but I will review applications as they arrive and until a suitable candidate is found

Contact:

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