Ph.D. Graduate Student Research Assistantship, Cornell University, Fisher Population Modeling

A Ph.D. position is available in the Fuller Spatial Ecology and Decision Science Lab https://blogs.cornell.edu/fullerlab/ with the New York Cooperative Fish and Wildlife Research Unit and the Department of Natural Resources and the Environment at Cornell University to evaluate the effects of harvest on fisher populations.

Background: Historically, fishers were distributed across New York, but the species was nearly extirpated by the 1930s as a result of unregulated trapping. Populations have recovered in many areas, allowing for sustainable harvest opportunities in some parts of the state (e.g., parts of the Adirondacks and eastern New York). The New York State Department of Environmental Conservation recently opened new areas to fisher harvest in central New York with a conservative trapping season as a result of occupancy work in our lab suggesting that specific Wildlife Management Units (WMUs) may be able to support a harvest season. The student will evaluate the effects of the conservative trapping season by comparing fisher occupancy and density 3 years pre- versus 3 years post-trapping season regulation change (data from >600 sites using camera trapping and hair snares). In contrast to central New York, fishers in the northern zone of New York may be declining in several Adirondack Wildlife Management Units. The student will develop a fisher population model and use a decision science approach to evaluate which harvest management scenario (e.g., variation in trapping season length, timing, bag limits) best achieves biological, social, and agency objectives. The research will provide decision-making guidance for the New York State Department of Environmental Conservation.

Graduate stipend provided is approximately $37,300/year. The assistantship also provides tuition and health insurance. The total projected award value is $236,000.

Qualifications: Successful applicants will have a thesis-based M.S. degree and an outstanding academic background in Ecology, Wildlife Biology, Natural Resources, or a closely related field. The student should be independent and motivated to work with a broad range of external collaborators. Successful applicants will possess strong writing and personal communication skills, as well as a desire to conduct quantitative science for applied resource management needs. Preference will be given to applicants with previous modeling and computational skills. Previous training in decision science or application of decision science is preferred. Proficiency with program R and knowledge of statistical modeling used to describe population dynamics is desired. Experience with occupancy and spatial capture-recapture models desired. Minimum undergraduate GPA of 3.5.

Application: Potential candidates should send **in a single pdf document** with the subject "Fisher PhD Assistantship" 1) a letter detailing your research interests and experience, an explanation of your academic interests and reasons for undertaking graduate work, including the relation to your professional goals 2) a CV 3) transcripts (unofficial is fine) 4) GRE scores (if available), and 5) contact information for 3 references to Dr. Angela Fuller (angela.fuller@cornell.edu) by February 10, 2021. Shortlisted candidates will be contacted and will be asked to apply for admission to Cornell University's Department of Natural Resources Graduate Program.

For additional information, please see:

Dr. Fuller's research profile: https://blogs.cornell.edu/fullerlab/
Cornell University Department of Natural Resources and the Environment: https://dnr.cals.cornell.edu/