

Postdoctoral Research Associate

Camera Trap Design and Occupancy of Mammals in NY



POSITION SUMMARY:

The Fuller Spatial Ecology and Decision Science Lab <https://blogs.cornell.edu/fullerlab/> at the New York Cooperative Fish and Wildlife Research Unit at Cornell University is seeking candidates for a postdoctoral position to estimate occupancy of mammal species in New York and to design a state-wide camera trapping study utilizing community science (possibly paired with systematic sampling) and integrating existing camera trap efforts within the state. The work is in cooperation with the New York Mammal Survey (NYMS), the first statewide assessment of the distribution and status of New York's terrestrial and freshwater mammals. The NYMS will guide environmental planning and conservation for mammals in New York, some of which are endangered or declining. The candidate will work to extend the iSeeMammals project <https://iseemammals.org/> to collect data on terrestrial and freshwater mammals in New York to support the NYMS. Depending on expertise, the candidate will work with a team currently developing a machine learning model to classify camera trap images. Occupancy models will be developed using two existing camera trap datasets at >1,000 sites (i.e., >600 sites surveyed 6 years + >450 sites surveyed 4 years). The candidate is encouraged to develop additional research questions using the camera trap data sets. There will be opportunities to mentor and collaborate with graduate students in the lab. The candidate will be expected to develop manuscripts for submission in peer-reviewed journals and communicate research to project partners. The candidate will be supervised by Dr. Angela Fuller, U. S. Geological Survey, NY Cooperative Fish and Wildlife Research Unit, at Cornell University (Ithaca, New York). The postdoc will work closely with the New York State Department of Environmental Conservation and project leads of the NYMS at SUNY ESF and the New York Natural Heritage Program.

MINIMUM REQUIREMENTS:

1. Ph.D. in ecology, wildlife biology, conservation biology, natural resources, statistics, or a related quantitative field.
2. Strong mathematical and programming skills, experience in statistical estimation and simulation modeling and use of R.
3. Previous experience with occupancy modeling.
4. Knowledge of animal ecology.
5. Experience with camera trapping studies and analyzing camera trap data.
6. Demonstrated desire and proven ability to publish in peer-reviewed journals.
7. Excellent writing and personal communication skills.
8. The ability to work independently and under limited supervision as well as collaboratively.

DESIRED QUALIFICATIONS: Previous experience in app development, designing or leading community science projects, machine learning applications classifying camera trap images.

POSITION LENGTH: 17 month appointment with end date not to exceed July 31, 2022. There is a possibility of extension, pending additional funding.

SALARY: ~\$53,000/year plus benefits (health and dental insurance, retirement, life insurance, disability)

START DATE: As soon as possible

TO APPLY:

Please send a curriculum vitae, a letter of application describing your background and experiences and responding to each of the requirements and qualifications, the names and contact information for three references, and 2-3 relevant papers. Please submit **a single pdf document** with the subject "Postdoc: NY Mammals" to Dr. Angela Fuller, angela.fuller@cornell.edu. Applications will be reviewed as received and continue until the position is filled.