

## Postdoctoral Research Scientist

### Density of American Marten and Occupancy of Carnivore Populations

#### POSITION SUMMARY AND DUTIES:

The New York Cooperative Fish and Wildlife Research Unit at Cornell University is seeking candidates for a postdoctoral position to estimate density of American marten and to develop occupancy models for a suite of carnivore species (marten, fisher, bobcat, coyote, red fox) in New York. The project will involve 1) Marten Density Estimation: estimate density and landscape connectivity of American marten using a spatial capture-recapture model by integrating non-invasive genetic data (collected over 4 years), live trapping data, and telemetry data (>100 individuals); 2) Co-occurrence Models: investigate regional patterns in co-occurrence of carnivore species in New York using occupancy modeling with camera trapping data (collected at over 700 sites in New York). Depending on interest, there will also be opportunities to assist with field work, including camera trapping and live-trapping/tagging fishers, but field work is not required. 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 Dr. Paul Jensen and other biologists with the New York State Department of Environmental Conservation.

#### MINIMUM REQUIREMENTS:

1. Ph.D. in ecology, wildlife biology, natural resources, or a related quantitative field.
2. Strong mathematical and programming skills, experience in statistical estimation, simulation modeling, and use of R.
3. Strong programming skills with demonstrated knowledge of statistical modeling used to describe population dynamics from mark-recapture data.
4. Previous experience with occupancy modeling.
5. Demonstrated desire and proven ability to publish in peer-reviewed journals.
6. Excellent writing and personal communication skills.
7. The ability to work independently and under limited supervision as well as collaboratively.

#### RECOMMENDED QUALIFICATIONS:

Competitive candidates will also have one or more of the following qualifications: have a background in Bayesian inference, hierarchical modeling, and experience with ArcGIS. Previous publications utilizing spatial capture-recapture and occupancy modeling preferred.

**POSITION LENGTH:** 19 month appointment with end date not to exceed March 31, 2020.

**SALARY:** \$50,000/year plus benefits (health and dental insurance, retirement, life insurance, disability)

**START DATE:** September 2018 (somewhat negotiable)

#### TO APPLY:

Please send a curriculum vitae, a letter of application describing your background and experiences relative to each of the requirements and qualifications, and the names and contact information for three references (all in a single pdf document) to Dr. Angela Fuller, Department of Natural Resources, Cornell University, NY Cooperative Fish and Wildlife Research Unit, 211 Fernow Hall, Ithaca, NY 14853, [angela.fuller@cornell.edu](mailto:angela.fuller@cornell.edu), (607) 255-2841. Deadline for applications is July 13, 2018, but the position will remain open until a suitable candidate is found.