

Title: Senior Research Scientist

Department: Environmental and Forest Biology

Salary Range: low \$50s to mid \$60s commensurate with experience

Duration: Through March 2018 with continuation dependent upon funding

Location: Albany, NY (New York State DEC Headquarters)

Brief Description of Duties: This position will work closely with the New York State DEC Bureau of Wildlife staff to plan, design, and conduct statewide and regional harvest surveys, population monitoring, and research activities that are integral to a variety of New York's wildlife management programs. The position involves the creation, manipulation, analysis and maintenance of complex data sets derived from a variety of user surveys and field studies throughout New York State. Computer programs for data processing need to be maintained and written in Access, and several Visual FoxPro programs need to be maintained until they are replaced by Access programs. Analyses primarily relate to estimation of population indices and harvests from annual survey data, and development and application of population models. The Senior Research Scientist also serves as a consultant to Bureau of Wildlife staff throughout the state and research collaborators, providing direct support with statistical analyses, guidance on sampling designs, evaluation of project proposals to ensure statistical validity, assistance with preparation and review of technical reports and manuscripts, and response to data requests from staff and the public. The position will primarily serve the needs of the Game Management Section, but will be expected to provide as much support as possible for the Wildlife Diversity Section and to our university research partners. The position will provide recommendations to various wildlife program specialists and management teams through collaboration in all project phases from conception to completion.

Primary responsibilities include, but are not limited to:

- * Provide statistical expertise and consultation for design and analysis of wildlife population research, user surveys, and monitoring programs and evaluate those surveys and programs after implementation.
- * Continue, and refine as appropriate, long-term data collection from hunter surveys to estimate annual harvests as well as hunter effort for deer, bear, wild turkey, furbearers and small game species statewide and by wildlife management unit.
- * Evaluate, and refine as appropriate, long-term data collection from a variety of wildlife observation surveys (e.g., bowhunter sighting log, big game hunter survey, grouse and turkey hunter logs, drumming surveys, incidental sightings) to monitor relative abundance of deer, bear, moose, turkey, selected furbearers, and other game and non-game wildlife species statewide.
- * Provide technical guidance on data management systems, maintain and update computer programs used to analyze survey data, and help identify and correct sources of errors that occur in telephone, internet and scannable form reporting systems.
- * Provide user-friendly reports and data queries from the above surveys as needed for public information or management purposes.
- * Perform or assist Bureau of Wildlife staff or cooperators with statistical analysis or programming (e.g., R, SAS, Access, Program MARK, DISTANCE, SURVIV, etc.) necessary to

produce results from harvest surveys, population monitoring programs, mark-recapture studies and other research activities; analyses may include information-theoretic and Bayesian inference, as well as estimating population parameters, population modeling and reconstruction.

- * Assist Bureau of Wildlife biologists in the preparation of peer-reviewed manuscripts and technical reports.

- * Train and supervise support staff to assist with data quality assurance and validation procedures.

- * Provide training for Bureau of Wildlife staff and cooperators on specific quantitative methods or statistical software needed to more effectively carry out their work.

- * Travel around New York State as needed to meet with and make presentations to regional staff, other professionals, and wildlife management stakeholders.

Minimum qualifications:

- * MS degree in biostatistics, wildlife population ecology, or related field.

- * Demonstrated experience in one or more of the following areas: design or evaluation of population or harvest surveys; population modeling; population viability analysis; occupancy modeling; mark-capture-recapture studies; distance sampling; movement or home range studies; spatial analysis of wildlife distribution patterns using ArcGIS.

- * Expertise using R and Microsoft Access. Familiarity with SAS or other comparable statistical programming software useful.

- * Strong written communication skills, including preparation of agency technical reports or publication as a lead author of at least one original research article in a peer-reviewed journal.

- * Strong interpersonal skills, including ability to establish and maintain satisfactory working relationships and collaborate with diverse personalities on project teams.

Preferred Qualifications:

- * PhD in biostatistics, wildlife population ecology, or related field.

- * Proficiency with likelihood-based and Bayesian inference.

- * Experience working closely with state or federal wildlife agency staff.

Date to Be Filled: June 1, 2014 or as soon as possible thereafter.

Application Deadline: Although the college will accept applications until the position is filled, interested candidates should submit their materials by May 12, 2014 to ensure optimal consideration.

Application Procedure: Employment application must be submitted on-line at <http://www.esf.edu/hr/>, follow the Current ESF Vacancies link. Be sure to include contact information for a minimum of 3 references in your resume/CV.