

Postdoc position: Modeling Climate-Adapted Plant Communities/Statistical Ecology

Salary: The annual salary is \$72k with full benefits. The position is funded by the [USGS Northeast Climate Adaptation Science Center](#) with an initial appointment of one year and a second year likely based on performance and continued funding.

Start date: Fall 2024

Description: The [Forest Dynamics Lab](#) at the University of Massachusetts, Amherst is recruiting a postdoctoral researcher with strong quantitative skills and an interest in actionable science. The postdoctoral research aims to develop and apply a state-of-the-art Bayesian joint species distribution model (JSDM) to identify native plant species expected to maintain viable populations under novel climatic conditions. Model outcomes will be used to inform decisions about which species to prioritize in conservation management projects aimed at promoting resilience to climate change. The position provides a unique opportunity to contribute to the methodological advancement of JSDMs while working on an applied conservation project with actionable science outcomes. The postdoc will be jointly supervised by Dr. Malcolm Itter and Dr. Bethany Bradley within the Department of Environmental Conservation.

The position will be located on the campus of University of Massachusetts in Amherst, in the Pioneer Valley of western Massachusetts. This is a fantastic location, with a remarkable mix of college atmosphere (Smith, Mt Holyoke, Hampshire, and Amherst Colleges are also here), culture, and natural resources. Some amount of remote work is possible.

The postdoc will participate in the vibrant Northeast Climate Adaptation Science Center (NE CASC) community (necasc.umass.edu) and will collaborate in stakeholder-driven research as a member of the Northeast Regional Invasive Species & Climate Change (RISCC) Management Network (risccnetwork.org). The RISCC Network aims to reduce the compounding effects of invasive species and climate change by synthesizing relevant science, communicating the needs of managers to researchers, building stronger scientist-manager communities, and conducting priority research. As part of RISCC, the postdoc will engage in actionable science and science communication that serves the network.

Qualifications: The successful candidate will provide research leadership, model development, project management, publication of results, and actionable science delivery. Candidates must possess a PhD in quantitative ecology, applied statistics, data science, or a similar field and should have experience working with JSDMs and/or Bayesian hierarchical models. Previous experience working with large-scale, multivariate spatial models is preferred.

To be considered for this position, please send a cover letter outlining your research background and interests, a curriculum vitae, and contact information for two professional references to Malcolm Itter (mitter@umass.edu). Review of applications begins June 17, 2024. Individuals who can add to the diversity of experience and knowledge in the Forest Dynamics Lab are strongly encouraged to apply.