

USGS NSF Internship Opportunity

●	Point of Contact Name:	Toni Lyn Morelli
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●	USGS Center:	Northeast Climate Science Center
●	Project Title:	Invasive Species and Climate Change
●	Summary:	The topic of how climate change will exacerbate the impacts of invasive species is at the cutting edge of conservation biology and applied ecology. We are looking for someone to work with a group of researchers and natural resource managers under the paradigm of translational ecology, producing publications and designing research that will improve conservation outcomes on the ground.
●	Project Hypothesis or Objectives:	A collaboration of researchers and managers are working to address the pressing concern of how climate change will affect invasive species. There are two next steps in this work. One is to synthesize the effects in the northeast region from the literature and connect these results to management actions and climate adaptation. Another is to consider how the horticulture industry and nursery trade can adjust to these increasing risks from climate change. From either of these research areas there are opportunities for peer-reviewed journal articles with top ecologists, as well as management/public communication documents that could be commonly used and locally targeted.
●	Duration:	Up to 12 months
●	Internship Location:	Amherst, MA
●	Field(s) of Study:	Geoscience, Life Science, Education
●	Applicable NSF Division:	EAR Earth Sciences, IOS Integrative Organismal Systems, DEB Environmental Biology, SES Social and Economic Sciences
●	Intern Type Preference:	Any Type of Intern
●	Keywords:	climate change, invasive species, ecology, conservation, management

- **Expected Outcome:** Short-term outcomes from the project will include a peer-reviewed journal article and a presentation to management stakeholders as well as the regional research community. In the longer term this work will build on a network of research that is looking at the impacts of climate change on invasive species. Specifically for the intern, they will get an opportunity to develop not only quantitative, climate science, and ecology skills but also skills in knowledge coproduction, working with stakeholders, and building contacts in the research and management community.
- **Special skills/training Required:** The intern will be expected to be a team player and to work well with their supervisor and the rest of the research and management community. They will need to be organized and self-motivated. Skills in ecological modeling and GIS are desirable. However, the project could take a few different directions depending on the intern's expertise and skills - there will also be opportunities to work closely with stakeholders and conservation practitioners.
- **Duties/Responsibilities:** This internship will be based at the Northeast Climate Science Center (NE CSC), which is based on the campus of University of Massachusetts in Amherst. As an intern at the NE CSC, you would be part of a 30+ graduate student/postdoctoral fellow interdisciplinary community that meets regularly and is provided a variety of capacity development opportunities. This includes being trained in techniques of knowledge coproduction and actionable science. You will be intellectually engaged in discussions of conservation, natural resource management, research design, and ecological modeling. Specific to this project, you will collaborate with scientists at the NE CSC and UMass that have worked together to build the Regional Invasive Species and Climate Change (RISCC) Management partnership (<http://people.umass.edu/riscc/>). You will also develop communication skills through daily rapport with direct supervisors, local natural resource personnel, and the general public; and likely co-author a peer-reviewed journal publication.
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Internal Information - Not to be posted:

Center Director Name: Olivia LeDee

USGS Responsibilities: Facilities, Mentoring, On-boarding, Volunteer Agreement Management

Preliminary Approval: This opportunity has my Center's approval

I already have a student in mind:

Comments:
