Thomas A. Lake

Postdoctoral Research Scholar · North Carolina State University

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Invasive Species Collaborative
Department of Forest Resources and Environmental Conservation
College of Natural Resources and Environment
Virginia Tech

Dear Members of the Search Committee,

I am writing to apply for the Assistant Professor in Global Change Ecology position at Virginia Tech with the Invasive Species Collaborative. I hold a B.S. in Conservation Biology and a Ph.D. in Plant and Microbial Biology from the University of Minnesota. I am currently a postdoctoral researcher at North Carolina State University in the Center for Geospatial Analytics with the Biological Invasions Group. I am passionate about interdisciplinary invasion science and eager to contribute to your department's efforts in addressing the grand challenge of invasive species.

My academic career is rooted in conservation biology and motivated by understanding the ecology and evolution of terrestrial invasive species. Throughout my research, I have sought to understand the mechanisms driving species invasions, their ecological consequences, and how we can better predict and manage invasive species under changing global conditions. My work combines field-based research with quantitative methods, such as machine learning and remote sensing, to address these challenges.
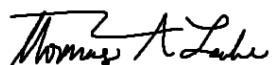
My research record reflects my commitment to both scientific excellence and interdisciplinary collaboration. At the University of Minnesota, I collaborated with ecologists, data scientists, and stakeholders through the Minnesota Invasive Terrestrial Plants and Pests Center, which fostered my ability to integrate ecological and evolutionary theory with innovative technologies. This style of collaboration has continued in my postdoctoral work at North Carolina State University, where I work closely with geospatial analysts and computer scientists to refine predictive models for biological invasions based on remotely sensed data. I am confident that my research experiences will allow me to contribute to Virginia Tech's Invasive Species Collaborative, where the intersection of ecology, technology, and policy is key to addressing the global challenge of invasive species.

As an educator, I am committed to fostering an inclusive and experiential learning environment. During my time as a teaching assistant at the University of Minnesota, I engaged students with hands-on learning and critical writing development. I look forward to contributing to Virginia Tech's academic programs by creating inclusive courses in global change ecology and mentoring students at both undergraduate and graduate levels.

I am excited about the interdisciplinary focus of this position and confident that my experience collaborating across disciplines – with ecologists, evolutionary biologists, geographers, and data scientists, positions me to contribute to Virginia Tech's Invasive Species Collaborative and advance its mission of excellence in research, management, and outreach.

Thank you very much for your time and consideration. I look forward to the hearing from you.

Sincerely,

Thomas A. Lake