

Overview: The Cariveau Native Bee Lab is hiring a postdoctoral research associate to study landscape and community ecology of native bees in pollinator plantings in southwestern Minnesota. Our laboratory group is part of the University of Minnesota Department of Entomology. Our research encompasses plant-insect interactions, pollination biology, restoration ecology, and rare and endangered bee biology and monitoring. We are housed in a new facility on the Saint Paul campus of the University of Minnesota at the Bee Research Laboratory.

Research: The Minnesota Agriculture for Pollinators Project (MAPP) was launched in 2017 with grants from the National Institute for Food and Agriculture and the Environment and Natural Resources Trust Fund. In 2018, we established 38 pollinator habitat plantings that varied in seed mix type, planting size and surrounding landscape composition. We are studying how these factors affect native bee communities, bumble bee reproduction, honey bee health, and natural enemies of soybean pests. In addition, we are conducting an economic analysis for different pollinator planting practices. Dan Cariveau is the primary PI on the project with co-PIs Elaine Evans, Marla Spivak, Robert Koch and Eric Lonsdorf.

The successful postdoctoral candidate will conduct research on native bee communities in the established pollinator habitats. Research questions are open and could include exploring: i) alpha and beta-diversity across treatments, ii) plant-pollinator networks, iii) native bee community compositional differences between experimental factors or changes through time, and/or iv) interactions among honey bees and native bees. We currently have 1 year of 'full' data collected on these plots, and one 'COVID' year of data representing a subsampling of sites. There will be ample opportunities to collaborate on other parts of the project.

Terms: The successful candidate will be expected to spend a significant portion of the field season (May – early September) in rural southwestern Minnesota along with the field crew. This will include working closely with a research scientist who will help manage the field crew and relationships with landowners. Housing during the field season will be provided. When not in the field season, the successful candidate will be based at the Bee Lab at the University of Minnesota, although remote work will be considered for the right candidate. Funding for this project is guaranteed for 1 year with an additional year contingent on satisfactory performance.

Responsibilities and Duties

Data analysis and writing (65%)

- Designing, creating and conducting high-quality research on native bees
- Analyzing data for peer-reviewed publications and grant reports
- Writing publications for peer-reviewed journals
- Assist in writing grant reports

Field work (25%)

- Collecting native bee specimens
- Collecting natural enemies of crop pests
- Identifying and quantifying floral abundance

Project Management (10%)

- Communicating with private landowners in southwestern Minnesota
- Communicating with state and federal agencies
- Assisting in hiring decisions of field technicians and undergraduate scientists

- Helping to supervise and mentor field technicians and undergraduate scientists

Anticipated Start Date: Could start as early as March 2021 but open to later dates.

Qualifications

Required Qualifications

- A PhD in ecology, entomology, conservation biology, restoration ecology or related field by the starting date of this position
- Strong quantitative skill set, especially in the analysis of landscape scale and community ecology data.
- Experience conducting research on plant-pollinator interactions and/or insect community ecology.
- Track record of publication in high-quality peer-reviewed journals
- Highly collaborative spirit that includes an interest in mentoring undergraduates and engaging with a diverse, motivated group of graduate students and research scientists.
- A commitment to promoting equity and inclusion within your research and the work environment
- Independent, self-starter, goal-oriented and the ability to manage time and priorities

Preferred Qualifications

- Experience working with private landowners in a rural setting.
- Ability to conduct statistical analysis and manage data in R, Python or other open-source software.
- Knowledge of restoration ecology
- Experience working with spatial data in ArcGIS and/or R.
- Knowledge of relational databases and willingness to learn MySQL

How To Apply

Applications must be submitted online through the University of Minnesota Human Resources website (<https://hr.myu.umn.edu/jobs/ext/338524>). Please feel free to contact Dan Cariveau dcarivea@umn.edu for any questions about the position.

To be considered for this position, please click the Apply button and follow the instructions. You will have the opportunity to complete an online application for the position and attach a cover letter and resume.

Additional documents may be attached after application by accessing your "My Job Applications" page and uploading documents in the "My Cover Letters and Attachments" section. This position requires that you attach, as a single (1) pdf: 1) A curriculum vitae, 2) cover letter describing past research and future research goals, and 3) contact information for 3 references that can speak to your research and collaboration skills.

Review of applications will begin January 5 and will continue until filled.

To request an accommodation during the application process, please e-mail employ@umn.edu or call (612) 624-UOHR (8647).

Diversity

The University recognizes and values the importance of diversity and inclusion in enriching the employment experience of its employees and in supporting the academic mission. The University is committed to attracting and retaining employees with varying identities and backgrounds.

The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. To learn more about diversity at the U: <http://diversity.umn.edu>.

Background Check Information

Any offer of employment is contingent upon the successful completion of a background check. Our presumption is that prospective employees are eligible to work here. Criminal convictions do not automatically disqualify finalists from employment.