

## **Pollinator Restoration Ecology Postdocs (2 positions)**

The Cariveau Lab (<https://www.beelab.umn.edu/meet-us/cariveau-native-bee-lab>) at the University of Minnesota – Twin Cities in the Department of Entomology is hiring 2 postdoctoral research associates to study pollinator restoration ecology. We are also part of the Bee Lab (<https://www.beelab.umn.edu/>), a vibrant group of more than 30 researchers, extension specialists, and educators dedicated to the research and conservation of pollinators. These postdoctoral researchers will find a supportive environment of collaboration, high caliber science from molecular to landscape scales, and research dedicated to important conservation challenges.

### **Plant Ecology & Seed Mix Design Postdoc**

One position will explore optimization of seed mixes to maximize pollinator diversity while minimizing economic costs. Seed mixes are becoming increasingly expensive and little is known about how seeding rate, diversity and plant composition influence success of pollinator plantings. This researcher will apply and revise optimization models regarding seed mixes and design seed mixes that will be implemented at field locations and monitored for use by pollinators. **This position will be co-advised by Eric Lonsdorf** (UMN – Institute on the Environment and Natural Capital Project) and will involve collaboration with Neal Williams (UC Davis) and Dan Larkin (UMN).

This researcher will combine modeling approaches with seed mixture experiments.

**Responsibilities include:** developing, applying and/or revising quantitative models, designing and conducting seeding experiments, managing a small field crew, collecting data, ensuring data quality, data analysis, and managing a relational database. **Required qualifications** are: PhD in ecology, evolution, entomology botany or related field, independence in developing research questions, statistical or modeling experience using R, Python or Matlab, record of publication in high-quality peer-reviewed journals, and valid driver's license at time by start of the position. **Preferred qualifications** include: experience building relational databases (e.g. MySQL), restoration or botanical field experience such as plant propagation, entomological experience particularly with pollinators, experience working with conservation practitioners, and an interest in mentoring undergraduates.

### **Native Bee - Prairie Restoration Postdoc**

This research will contribute to understanding how landscape context influences native bee community composition in restored and remnant prairies as well as the role of native bees in pollination of native plants in restoration. This postdoc will work with data from a large-scale landscape study of twenty sites in western Minnesota initiated in 2017.

**Responsibilities include:** analyzing and interpreting complex ecological data such as plant and pollinator community composition, writing and co-writing manuscripts, helping manage a field crew, collecting data, ensuring data quality, and analyzing data. S/he will independently develop research questions while also collaborating with graduate students working on the project. This postdoc will spend the summer (May – September) in western Minnesota. Field

housing will be provided. **Required qualifications** are: PhD in ecology, evolution, entomology or related field, independence in developing research questions, ability to analyze complex data using mixed models and multivariate techniques, record of publication in high-quality peer-reviewed journals, and valid driver's license at time by start of the position. **Preferred qualifications** include: bee identification, prairie research experience, experience building or maintaining relational databases (e.g. MySQL), ArcGIS or similar spatial analyses in R and/or Python, experience working with conservation practitioners, and an interest in mentoring undergraduates.

**For both positions**, we expect successful candidates to engage with a highly interactive group of graduate students, research scientists and undergraduates. There will be numerous opportunities to collaborate and develop projects with other lab members and to collaborate with the PI and others on existing data sets.

Postdoctoral associates will be full time with benefits. Minimum salary will be the base postdoctoral research associate salary of \$47,500 plus benefits. Initial appointment is for 1 year with extensions dependent on job performance

**To apply:**

Send a single pdf including a CV, cover letter, and names and contact information to Dan Cariveau at: [dcarivea@umn.edu](mailto:dcarivea@umn.edu). In the subject line, write PollinatorPostdoc. In your cover letter, please note whether you are interested in the prairie restoration position, plant ecology-seed mix position or both. Review of applications will begin December 19<sup>th</sup> but applications will be accepted until position is filled. Start date can be as soon as possible. For the prairie restoration postdoc, a spring 2018 start date is preferred.