

Postdoc in Conservation Biocontrol; Departments of Entomology and Wildlife, Fish, & Conservation Biology, University of California, Davis

- Application review begin date: June 1, 2025 (applications solicited until position is filled)
- Start date may be flexible based on applicant needs and alignment with project, but expected to be in Late Summer or Early Winter 2026
- Location: In-person at UC Davis, Davis, CA

SUMMARY:

We are seeking a Postdoctoral Researcher with expertise in entomology and/or agro-ecology to be jointly advised by Ian Grettenberger in the Department of Entomology and Nematology and Daniel Karp in the Department of Wildlife, Fish, and Conservation Biology at the University of California, Davis. The initial appointment will be for one-year, with a very likely extension for a second-year contingent on adequate performance. A third year of employment is also possible, depending on continued funding availability. The postdoctoral researcher will join a team of UC Davis faculty and students, as well as USDA scientists and collaborating growers. The project will be focused on experimentally assessing the role of non-crop vegetation in providing biological control in California lettuce crops. The postdoc will be based at UC Davis but will work extensively in the Monterey/San Benito County areas and will collaborate closely with scientists at the USDA Agricultural Research Service in Salinas, California (*i.e.*, Dr. Eric Brennan and Dr. Daniel Hasegawa).

California lettuce production, and coastal vegetable production more broadly, has faced many pest issues and crop losses. In some cases, insecticides have proven insufficient at controlling target pests and vectored pathogens. Another approach is managing pests by conserving their natural enemies and then relying on natural biocontrol. The successful applicant will work on a collaborative project, funded by the Biologically Integrated Farming Systems Program within the California Department of Food and Agriculture, that seeks to evaluate whether and how intercropped annual plants and perennial plants in hedgerows could be integrated into industrial-scale California lettuce to provide effective insect pest control. The project's four objectives include: (1) determining where and at which densities sweet alyssum should be planted within lettuce fields for aphid control, (2) quantifying how diverse annual planting strips could be deployed to control multiple lettuce pests, (3) assessing which annual and perennial plants best support support natural enemies and depress pest populations, and (4) extending project results to vegetable growers, pest control advisors, and other industry personnel.

The postdoc, with mentorship from Grettenberger and Karp, will be primarily responsible for implementing the flower strip study in California's Salinas Valley (*i.e.*, Objective 2, above). This will include method development, deploying and managing large field trials, analyzing data, and preparing academic manuscripts. The postdoc will be encouraged to co-develop research questions and approaches based on their interests. They will also collaborate with project personnel on all other aspects of the research program, affording multiple co-authorship opportunities. Finally, the postdoc will (1) help coordinate project meetings, (2) develop extension materials, and (3) mentor undergraduates and field technicians.

QUALIFICATIONS:

- A Ph.D. in Ecology, Entomology, or a closely related field.
- Strong interpersonal and communication skills and an ability to work both independently and collaboratively with researchers and practitioners from different backgrounds.
- Experience designing, planning, and executing research projects.
- Experience with entomological field methods

- Strong quantitative skills and demonstrated proficiency with R.
- Demonstrated ability to follow through on project deliverables and communicate findings in high quality peer-reviewed journals.

The following qualifications are preferred but not required:

- Prior experience working in agroecosystems and/or interacting with growers and pest managers.
- Prior experience managing field projects and mentoring students.

SALARY:

Salary and benefits are consistent with UC Davis policy and applicant experience. See links for salary scale and benefits information: https://www.ucop.edu/academic-personnel-programs/_files/2024-25/oct-2024-scales/t23.pdf and <https://hr.ucdavis.edu/employees/benefits/post-doc-scholars>

TO APPLY:

Please apply by preparing: (1) your CV inclusive of publications, awards, and field experience, (2) a cover letter discussing your qualifications, research interests, and motivations for this position, and (3) contact information for 3 references. Send materials to imgrettenberger@ucdavis.edu and dkarp@ucdavis.edu with the subject line: “**Conservation Biocontrol Postdoc Application.**”