Project Submission deadline: *February 23rd 2018*

**Faculty Name:** Claire Kremen

**Email:** ckremen@berkeley.edu

**Phone Number:** (510) 643-6339

**Department/Organization Affiliation:** Department of Environmental Science, Policy, and Management

**Preferred Method of Contact:** Please email applications to Elissa Olimpi at eolimpi@ucdavis.edu.

**Project Name(s):** Strawberry Bird Project

**General Topic (Keywords):** bird conservation, agroecology, diversified farming systems, mist-netting, point counts

**Project Description(s):** The Kremen Lab is seeking 1-2 undergraduate researchers to join an avian agroecology research team. This team is focused on evaluating the costs and benefits of wild birds in strawberry systems in the California Central Coast.

Currently, birds are viewed as a food safety hazard and pest in farmlands. Yet birds provide benefits to growers by consuming pests. Berry growers are often pressured to prevent birds from accessing their farms, despite limited research into bird-induced crop damage. Farmers commonly practice bird-deterrent activities, such as clearing habitat and scaring birds with sound cannons.

This research project aims to:

1) Identify which bird species are pest, vector and beneficial species and quantity their net economic impact on strawberry crops

2) Determine co-management strategies to achieve conservations, food safety and production goals

The research teams hypothesizes that diversified farms—with multiple crops and maintained
non-crop habitats—conserve diverse bird communities that help to control insect pests and improve crop yields. In contrast, monoculture farms are dominated by bird species that are pests and vector food borne diseases. This project has the scope to change practices and provide important management recommendations.

Fieldwork includes assisting in bird point counts, mist-nesting, exclosure experiments and insect sampling. These will be used to quantify bird impact on strawberry crops and survey strawberry damage.

**Desired Skills or Experience:**
Previous field experience is not required, but preference may be given to students with the following interests/skills:
- Desire to gain field experience
- Interest in agroecology
- Experience with insect sampling techniques
- Experience with point counts and/or mist-netting
- Interest in conducting independent research project

**Time Commitment:**
Full time, 40hrs/wk from approximately May 7- late July
Shorter-term commitments of 2+ weeks may also be considered

**Preferred Starting Date:**
May 7, may be flexible