

Isaac Owens

Curriculum Vitae

iowens@csub.edu

(661) 546- 0649

12711 Stemple Drive, CA

Education

M.S., Biology – California State University, Bakersfield, CA *Expected May 2025*

- Thesis Advisor: Dr. Rae McNeish

B.S., Biology – California State University, Bakersfield, CA *August 2023*

- CSUB GPA – 2.78

Professional Experience

Graduate Research Assistant, California State University, Bakersfield, CA *Summer 2023*

- Developing research projects focused on 1) changes in river features and aquatic biota across an elevation gradient in an arid climate and 2) explore if there is an edge effect in the kern water bank basins and if this is correlated with birds using those basins

Environmental Consulting Field Technician, Dudek., Bakersfield CA *Summer 2023*

- Conducted biological field surveys focused on protected species in the San Joaquin Valley, CA

Chevron Summer Undergraduate Research Experience (SURE) *Summer 2021*

- In a study conducted in the potential Buena Vista Lake Shrew habitat across the Tulare Basin, camera trap surveys were used to collect data on terrestrial vertebrates. For data collection my team utilized environmental photos from the US Fish and Wildlife and the Endangered Species Recovery Program. We calculated species diversity in various areas in California using the Shannon Diversity Index

Chevron Summer Undergraduate Research Experience (SURE) *Summer 2023*

- Led undergraduate researchers to explore cattle grazing effects on stream ecosystems and aquatic macroinvertebrate communities. Our team presented data through comparison of means and relative abundance figures.

Funding

Owens, I (2023) Application of the River Continuum Concept to arid streams across an elevational gradient. *CSUB Title Vb: STEM Graduate Excellence*. **Awarded:** \$1,500

Research Presentations

Poster Presentation:

Araceli R.V, C. Duran, J. Lo, and **I. Owens** (2023) Terrestrial-aquatic Connections: Cattle grazing effects on stream ecosystems and aquatic macroinvertebrates. *CSUB Summer Undergraduate Research Experience (SURE) Poster Session*

Ponce, F.R., I. Owens, A.D. Gabaldon, E.C. Kelly, B.L Cypher, and L.K Hall (2023) The influence of road proximity on den activity of San Joaquin kit fox (*Vulpes macrotis mutica*). *Student Research, Scholarship, and Creative Activity Poster Presentation 2023*

PowerPoint Presentation:

Ponce, F.R., I. Owens, A.D. Gabaldon, E.C. Kelly, T.L Westall, N.A Deatherage, B.L Cypher, and L.K Hall (2023) Denning Ecology of the Endangered San Joaquin Kit Fox on CSUB (*Vulpes macrotis mutica*). *San Joaquin Valley Chapter TWS Natural Communities Conference*

Ponce, F.R., I. Owens, A.D. Gabaldon, E.C. Kelly, T.L Westall, N.A Deatherage, B.L Cypher, and L.K Hall (2023) The Influence of Road Proximity on Den Activity of the San Joaquin Kit Fox (*Vulpes macrotis mutica*). *Sustainability Symposium Conference*

Relevant Skills

Computer Programs

- Some experience with GIS via ArcPro program
- Microsoft Office Word, Excel, and PowerPoint

Statistical Analyses and Data Visualization:

- Data Analysis in Excel using data analysis toolpak
 - One and two factor ANOVA, one and two sample t-tests, linear regression
- Visualize data in Excel

Aquatic Ecology Research:

- Aquatic macroinvertebrates: Stream sampling via Surber sampler and identification via dichotomous keys. Collecting macroinvertebrate samples with D-frame net
- Microplastic pollution: Some experience with microplastic identification via dissection microscope while using best laboratory methods to reduce microplastic contamination
- Nutrient analyses: Some experience using Hach kits to process water samples for nitrate, nitrite, ammonia, and orthophosphate concentrations
- Some experience removing emergent vegetation
- Some experience using an inflatable boat

Environmental Consulting:

- Surveyed for the Pelicans Jaw Project and Driftwood Wildlife Studies for the Blunt-nosed Leopard Lizard (*Gambelia sila*).
- Identifications During Surveys: Kangaroo Rat (*Dipodomys sp.*), Side Blotched Lizard (*Uta stansburiana*), Whiptail Lizard (*Aspidoscelis tigris*), Northern Pacific Rattlesnake (*Crotalus oreganus oreganus*), and Nelson's Antelope Ground Squirrel (*Ammospermophilus nelson*)
- Experience using Field Maps App
- Experience using Wind meter and a Thermometer for air and soil temp

Communication:

- Leading and managing teams to efficiently complete assigned tasks
- Strong presentation and scientific communication skills via poster and oral presentations
- Experience with technical writing via research papers and proposals
- Collaborate with undergraduate students to meet research goals

Volunteer and Outreach Activities

<i>Excel Scholars Club President</i>	2020-2023
<i>Mentor for CSUB's conference for Budding Leaders</i>	2021-Present
Member of Students for Sustainability	2022-Present
Member of Kit Fox Society	2022-Present
Member of Biology Club	2020-Present