

Loralee Larios

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University of California
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RESEARCH INTERESTS

Plant population & community ecology, species coexistence, plant-animal interactions, plant-soil feedback, human impacts on ecosystems, restoration ecology and invasion ecology, ecological resilience

EDUCATION

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|-------|------|---|
| Ph.D. | 2013 | University of California at Berkeley, Department of Environmental Science, Policy and Management. Dissertation: "Mechanisms for Species Coexistence under Environmental Change: Insights from a California Grassland" |
| B.S. | 2005 | California State University, Fullerton. Biology (<i>magna cum laude</i>) |

PROFESSIONAL APPOINTMENTS

- Associate Professor*, Botany and Plant Sciences, University of California, Riverside. 2025 - present
- Assistant Professor*, Botany and Plant Sciences, University of California, Riverside. 2017-2025
- Cooperating Faculty Member*, Evolution, Ecology & Organismal Biology, University of California, Riverside. 2017-present
- Assistant Professional Research Scientist*, Botany and Plant Sciences, University of California, Riverside. 2016-2017
- NSF Postdoctoral Research Fellow*, Division of Biological Sciences, University of Montana. 2013-2017

HONORS & AWARDS

- Ecological Society of America – Early Career Fellow 2021
- NSF Postdoctoral Fellow in Biology – 2013-2016
- NSF Graduate Student Research Fellow – 2008-2013

PEER REVIEWED PUBLICATIONS (‡graduate student/undergraduate/technician/postdoc mentee)

37. Schwab, S.‡, Portez, B.‡, Jenerette, G.D., and Larios, L. *In press*. Invader soil conditioning impacts invader and native plant performance. *AoB PLANTS*
36. McCann, E.‡, Flores, Z.‡, Franklin, J., Spasojevic, M.J., Molinari, N. and Larios.

- L. 2025/ Postfire recovery trajectories of bulldozed versus burned chaparral eight years postfire. *Fire Ecology* 21:78.
35. Rodriguez, C.S.‡, Sweet, L., Davis, M., Heacox, S., Barrows, C. and **Larios, L.** 2025. Temporal Invasion Regime Attributes Influence Community Synchrony and Stability in an Arid Land System. *Ecology* 106(4): e70081.
 34. Slate, M. L., Sporbert, M., Hensen, I., Hierro, J. L., Korell, L., **Larios, L.**, Nagy, D. U., Pearson, D. E., Waller, L., Wolf, F., & Rosche, C. 2025. Drivers of phenological transitions in the seedling life stage. *Functional Ecology*, 00, 1–14.
 33. Zhu, K., Song, Y., Lesage, J.C., and 15 others (including **Larios, L.**) 2024. Rapid shifts in grassland communities driven by climate change. *Nature Ecology & Evolution* 8: 2252-2264
 32. Rodriguez, C.S.‡, McDonald, C., Bean, T., and **Larios, L.** 2024. Efficacy of invasive plant control depends on season of herbicide application and invader seed bank density *Restoration Ecology* e14237
 31. Suding, K.N., Collins, C.G., Hallett, L.M., **Larios, L.**, Brigham, L., Dudney, J., Farrer, E., Larson, J., Shackelford, N., and Spasojevic, M.J. 2024. Biodiversity in changing environments: an external-driver internal-topology framework to guide intervention. *Ecology* e4322.
 30. Rose, M.B., Mills, M.W., Franklin, J. and **Larios, L.** 2023. Mapping fractional vegetation cover using UAV imagery to guide conservation of a rare riparian shrub ecosystem in southern California. *Remote Sensing* 15:5113
 29. Mills, M.W., **Larios, L.** and Franklin, J. 2023. Enhancing Long-Term Ecological Management and Monitoring of Landscapes: the L-TEAM framework. *Land* 12: 1942
 28. Rodriguez, C.S.‡, Rose, M.B., Elías Velazco, S.J., Franklin, J., and **Larios, L.** 2023. High potential for *Brassica tournefortii* spread in North American introduced range, despite highly conserved niche. *Biological Invasions* 26:337–351
 27. Schwab, S.T.‡, Quides, K.W., Wendlandt, C.E., Trinh, J., Sung, M., Cardenas, P., Torres, M., Santiago, L.S., **Larios, L.**, & Sachs, J.L. 2023. Rhizobia enhance legume growth under drought despite water costs associated with nitrogen fixation. *Plant and Soil* 492:1-19
 26. Hallett, L.M., Aoyama, L., Barabas, G., Gilbert, B., **Larios, L.**, et al. 2023. Restoration ecology through the lens of coexistence theory. *Trends in Ecology and Evolution* 38:P1085-1096
 25. Schwab, S.T.‡, Jenerette, G.D. and **Larios, L.** 2023. Prescribed burning may produce refugia for invasive forb, *Oncosiphon pilulifer*. *Restoration Ecology* 31:e13922.
 24. Farrell, H.L., Munson, S.M., Butterfield, B.J., Duniway, M.C., Faist, A.M., Gornish, E.S., Havrilla, C.A., **Larios, L.**, Reed, S.C., Rowe, H.I., Laushman, K.M. and McCormick, M.L. 2023. Soil surface treatments and precipitation timing determine seedling development across southwestern US restoration sites. *Ecological Applications* 33: e2834.
 23. Glassman, S.I., Randolph, J., Saroa, S.S.‡, Capocchi, J.K., Walters, K.E. Pulido-

- Chavez, M. F., and **Larios, L.** 2023. Prescribed versus wildfire impacts on exotic plants and soil microbes in California grasslands. *Applied Soil Ecology* 185: 104795
22. Pulido-Chavez, M. F., Randolph, J., Zalman, C., **Larios, L.**, Homyak, P., and Glassman, S.I. 2023. Rapid bacterial and fungal successional dynamics in first year after Chaparral wildfire. *Molecular Ecology* 32:1685-1707
 21. Zalman, C., Hanna, E., Rush, J., Boise, K., and **Larios, L.** 2023. Vegetation type and fire severity mediate short-term post fire soil microbial responses. *Plant and Soil* 484:155-170
 20. **Larios, L.** and Hallett, L.M. 2022 Incorporating temporal dynamics to enhance grazing management outcomes for a long-lived species. *Journal of Applied Ecology* 59: 2936-2946
 19. Jenerette, G. D., Anderson, K., Cadenasso, M., Fenn, M., Franklin, J., Goulden, M., **Larios, L.**, Pincetl, S., Regan, H., Rey, S., Santiago, L., and Syphard, A. 2022. An Expanded Framework for Wildland-Urban Interfaces and their Management. *Frontiers in Ecology and the Environment* 20:516-523
 18. Aoyama, L., Shoemaker, L.G., Gilbert, B., Collinge, S.K., Faist, A.M., Shackelford, N., Temperton, V.M., Barabás, G., **Larios, L.**, Ladouceur, E., Godoy, O., Bowler, C., and Hallett, L.M. 2022. Application of modern coexistence theory to rare plant restoration provides early indication of restoration trajectories. *Ecological Applications* 32: e2649.
 17. Charles, L. S.‡, Maron, J. L., and **Larios, L.** 2022. Species provenance and traits mediate establishment and performance in an invaded grassland. *Functional Ecology* 00: 1– 14.
 16. Baur, M., Meador, B., Burger, J., Fry, D., Erickson, D., **Larios, L.**, James, J., Al-Khatib, K., Davy, J., Forero, L., Rinella, M., Randall, C., Teller, N., & Mangold, J. (2022). Managing Fire-Adapted Invasive Plants in the American West. *Outlooks on Pest Management*, 33(5), 177–183.
 15. Weiss-Lehman, C.P., Werner, C.M., Bowler, C.H., Hallett, L.M., Mayfield, M.M., Godoy, O., et al. 2022 Disentangling key species interactions in diverse and heterogeneous communities: A Bayesian sparse modelling approach. *Ecology Letters* 00: 1– 14.
 14. Underwood, E., Hollander, A., Molinari, N., **Larios, L.**, and Safford, H. 2022. Identifying Priorities for Post-fire Restoration in California Chaparral Shrublands. *Restoration Ecology* 30: e13513 (Featured in Cross Society Special Feature on the Decade of Ecosystem Restoration)
 13. Sandel, B., Pavelka, C., Hayashi, T., Charles, L.‡, Funk, J., Halliday, F.W., Kandlikar, G.S., Kleinhesselink, A.R., Kraft, N.J.B., **Larios, L.**, Madsen-Queen, T., and Spasojevic, M.J. 2021. Predicting intraspecific trait variation among California's grasses. *Journal of Ecology* 109: 2662-2677
 12. Luo, X., **Larios, L.** D'Antonio, C., Xu, X. & Guo, H. 2021. An invading annual plant benefits less from soil biota and has reduced competitive power with a resident grass, *Journal of Plant Ecology* 14: 945–958
 11. **Larios, L.** and Maron, J.L. 2021. Voles mediate trait composition along a resource gradient. *Functional Ecology* 35: 205-215

10. Grinath, J. B., **Larios, L.**, Prugh, L. R., Brashares, J. S., and Suding, K. N. 2019. Environmental gradients determine the potential for ecosystem engineering effects. *Oikos* 128: 994-1004
9. **Larios, L.**, Hallett, L.M. and Suding, K.N. 2017. Where and how to restore in a changing world: a demographic-based assessment of resilience. *Journal of Applied Ecology* 54: 1040–1050 (Special Issue: Toward prediction in the restoration of biodiversity).
8. Brudvig, L.A., Barak, R.S., Bauer, J.T., Caughlin, T.T., Laughlin, D.C., **Larios, L.** et al. 2017. Interpreting variation to advance predictive restoration science. *Journal of Applied Ecology* 54: 1018-1027 (Special Issue: Toward prediction in the restoration of biodiversity)
7. **Larios, L.**, Pearson, D.E. and Maron, J.L. 2017. Incorporating the effects of generalist seed predators into plant community theory. *Functional Ecology* 31: 1856-1867
6. Dudley, J., Hallett, L.M., **Larios, L.**, Farrer, E.C., Spotswood, E. N., Stein, C. and Suding, K.N. 2017. Lagging behind: have we overlooked previous-year rainfall effects in annual grasslands? *Journal of Ecology* 105: 484-495.
5. Bechara, F.C, Dickens, S.J., Farrer, E.C., **Larios, L.**, Spotswood, E. N., Mariotte, P., & Suding, K.N. 2016. Neotropical rainforest restoration: comparing passive, plantation and nucleation approaches. *Biodiversity Conservation* 25: 2021.

_____joined UC Riverside_____

4. **Larios, L.** and Suding, K.N. 2015. Competition and soil resource environment alter plant-soil feedbacks for native and exotic grasses. *AoB PLANTS*. 7: plu077 (Special Issue: The role of below-ground processes in mediating plant invasions)

___PhD conferred from UC Berkeley___

3. **Larios, L.**, Aicher, R.J., and Suding, K.N. 2013. Effect of propagule pressure on recovery of a California grassland after an extreme disturbance. *Journal of Vegetation Science* 24:1043-1052
2. Cleland, E., **Larios, L.**, and Suding, K.N. 2013. Strengthening invasion filters to re-assemble native plant communities: soil resources and plant phenology. *Restoration Ecology* 21:390-398
1. Aicher, R.J., **Larios, L.**, and Suding, K.N. 2011. Seed supply, recruitment and assembly: quantifying relative seed and establishment limitation in a plant community context. *The American Naturalist* 178:464-477

PUBLICATIONS: IN REVIEW/REVISION (‡graduate student/undergraduate/technician/postdoc mentee)

2. Kargul, M.‡ and **Larios, L.** *In revision*. The influence of regeneration traits and topography on chaparral post-fire recovery. *Ecosphere*.
1. Head, J., Campo, S., Weaver, A., Montoya, L., Lee, E., Radosevich, M., Jones, I., Wagner, R., Bhattachan, A., Campbell, G., Keeney, N., Collender, P., Heaney, A., Colvin, K., **Larios, L.**, Bean, W.T., Taylor, J. and Remais, J. *In revision*.

Small mammals and their burrows shape the distribution of Coccidioides in soils: a long-term ecological experiment. *Ecology*.

PUBLICATIONS: BOOK CHAPTERS

1. Spiegel, S., **Larios, L.**, Bartolome, J. W., and Suding, K.N. 2014. Restoration management for spatially and temporally complex Californian grasslands. In: P. Mariotte and P. Kardol (eds). *Grassland Biodiversity and Conservation in a Changing World*. Nova Science Publishers, Inc: New York 69-104
1. **Larios, L.** and K.N. Suding. 2013. Restoration within protected areas: when and how to intervene to manage plant invasions? In: Foxcroft, L.C., Richardson, D.M., Pyšek, P. and Genovesi (eds). *Plant Invasions in Protected Areas: Patterns, Problems, and Challenges*. Invading Nature - Springer Series in Invasion Ecology, vol 7. Springer, Dordrecht 599-618

PUBLICATIONS: NON-PEER REVIEWED

8. Eitzel, M.V., Rodriguez-Buritica, S., Harpole, W.S., Aicher, R.J., **Larios, L.**, McClaran, M., and Suding, K.N. *In press*. Reproduction and Recruitment of Blue Oak in the Sierra Nevada Foothills of California. Proceedings of the eighth symposium on oak woodlands: Sustaining oak woodlands under current and future conditions. Gen. Tech. Report: U.S. Department of Agriculture, Forest Service
7. McDonald, C., Rodriguez, C.† and **Larios, L.** 2023. Pestnote: Stinknet. <https://ipm.ucanr.edu/natural-area-pests/stinknet/#gsc.tab=0>
6. **Larios, L.**, Franklin, J., Mills, M. and Rose, M.R. 2023. Cajon Creek Conservation Area – Final Report of UC Riverside Activities 2020-22
5. Schwab, S.†, Jenerette, G.D., and **Larios, L.** 2022. Post-prescribed burn patch dynamics influencing native forb establishment.
4. Bean, W.T. and **Larios, L.** 2022. Carrizo Plain Ecosystem Project Annual Report (2020 & 2021). Prepared for Bureau of Land Management
3. Rodriguez, C.† and **Larios, L.** 2021. Assessing chemical management options for the control of stinknet (*Oncosiphon piluliferum*). Prepared for Riverside County Habitat Conservation Authority, California State Parks and UC Motte Rimrock Reserve
2. Bean, W.T., Charles, L.†, and **Larios, L.** 2020. Carrizo Plain Ecosystem Project Annual Report (2018 & 2019). Prepared for Bureau of Land Management
1. Hallett, L.M. and **Larios, L.***. Effects of grazing on *Stipa pulchra* (purple needlegrass) populations. 2014-2018. Prepared for the East Bay Regional Park District. *co-lead authors

GRANTS AND FUNDING (*teaching/training/outreach grants)

Natural Communities Coalition, “Assessing Conservation Grazing and Habitat Enhancement Strategies on Native Plant Composition and Vegetation” 2025-2031. Co-PI \$465,011

- Bureau of Land Management, "Assessing vegetation and seed bank dynamics to evaluate seeding and post-restoration management strategies" 2024-2029. PI \$320,196.00
- UC Regents Faculty Development Award, "Investigating the role of herbivory in conserving plant diversity in a drying climate" 2023-2025. PI \$7,500
- California Department of Transportation, "Behavior in Vegetative Barriers of Aerosol Particulate Matter 2.5 (PM2.5) and PM10 along Highways" 2023-2024. Co-PI \$375,000
- University of California Hispanic-Serving Institution, "Building Bridges to the Professoriate: A UCR - Cal State Collaboration" 2023-2027. Co-PI \$349,925*
- University of California Advancing Faculty Diversity, "Increasing Faculty Retention in CNAS Through Mentorship" 2022-2025. Co-PI \$174,430*
- United States Department of Agriculture, "Managing for multiple ecosystem services within California rangelands" 2020-2025. PI \$114,781
- Vulcan Materials, "Conservation Grazing Evaluation for Cajon Creek Habitat Conservation Management Area" 2019-2024. PI \$75,000
- ASPB Plant BLOOME "Alleviating the Outreach Drought with Scientists in the Classroom" 2019-2022. PI \$31,402*
- United States Forest Service, "Ecological Support for the Powerhouse Fire" 2018-2024. PI \$288,495
- University of California, Agriculture and Natural Resources, "Impact of a warmer and drier future on rangeland ecosystems and ecosystem services" 2018-2020. Co-PI \$199,831
- East Bay Regional Park District, "Disentangling the factors driving temporal variation in the effectiveness of grazing management on purple needlegrass (*Stipa pulchra*)" 2018-2021. PI \$17,000
- University of California Innovative Learning Technology Initiative, "Ecology and Conservation Biology; Global Change Ecology" 2018-2021. Co-PI \$217,000*
- Riverside County Habitat Conservation Agency, "Evaluating the ecological effects of and management options for Stinknet (*Oncosiphon piluliferum*) 2018-2022. PI \$53,699

Previous

- National Science Foundation Minority Postdoctoral Research Fellowship in Biology, "Assessing trade-offs between granivory/herbivory and competitive interactions on plant community structure: a functional approach"- \$207,000, 2013-2017 (PI)
- National Science Foundation Graduate Research Fellowship, "Effects of Nitrogen (N) deposition on ecological resilience of a native plant community" - est. \$120,000, 2008-2013
- National Science Foundation, Supplement, Division of Environmental Biology, "Multiple states in grassland systems: invasion and environmental feedbacks" - \$50,000, 2007-2008

Select grants awarded to undergraduate & graduate students in my lab

Bloom-Hays Ecological Research Grant, \$1250, Samuel Louden, 2024
 Mayhew Graduate Research Award, \$1,000, Ariana Firebaugh-Ornelas, 2022
 Shipley-Skinner Reserve Riverside County Grant, \$16,335, Clarissa Rodriguez, 2021
 UCR Mini-Grant, \$400, Michelle Ortiz, 2020
 Western Integrative Pest Management, "Testing community functional composition of vegetation buffers to improve postfire invasion resistance of Coastal Sage Scrub"- \$29,822, Noah Teller 2018

WORKING GROUPS & RESEARCH INITIATIVES

Long-Term Ecological Research network working group. Participant. Aim: Selection across scales—merging evolutionary biology and community ecology to understand trait shifts in response to environmental change. 2023-present
 German Centre of Integrative Biodiversity (iDiv) Working Group. Participant
 Aim: Applying coexistence theory to restoration ecology and adaptive management 2019-2023. Outputs: 3 peer reviewed publications
 NSF Long-Term Ecological Research network working group. Participant
 Evaluate plant community responses to extreme climate events across multiple LTER sites. Participant. 2013-2014
 Restoration Consultant, East Bay Regional Park District, "Effects of grazing management on purple needlegrass (*Stipa pulchra*) restoration." 2013-2022. Outputs: 5 non-peer reviewed reports, 1 peer reviewed publication

TEACHING EXPERIENCE AT UC RIVERSIDE

Instructor, BPSC165: Restoration Ecology (Yearly Winter) 2019 – present
 Covers topics such as managing population dynamics, enhancing/altering succession on restored lands, ecological impacts of invasive species, and species interactions pertinent to land management and the determination of successful restoration. Lecture and Lab ~30 undergraduate students (redesigned course)

Instructor, BPSC146: Plant Ecology (Spring) 2023, 2024
 Covers information on the biotic (living) and abiotic (non-living) elements of the environment that influence the distribution and abundance of organisms at different levels of organization from individuals to landscapes. Lecture and Lab ~10 undergraduate students (team taught in 2023; redesigned course, including creating a lab manual)

Instructor, BPSC193 (team taught): Senior Seminar in Plant Biology
 A required course for all graduating seniors that emphasizes Spring 2023

thinking across hierarchical levels and understanding plant structure-function relationships by synthesizing material from courses students have taken at all scales. Seminar. 9 undergraduate students

Instructor, EEOB211(team taught): Foundations of Ecology (Yearly) 2019-2022
A core graduate-level course that examines the history and theory behind fundamental ecological principles through readings and discussions of classic and recent literature. Seminar. ~12 graduate students

Instructor, BPSC240: Natural Resource Management & Indigenous Science Spring 2022
Examines the cultural and historical roadblocks to collaborative ecosystem management – a system where Indigenous knowledge is recognized and leveraged to enhance natural resource management. Seminar. 12 graduate students (new course)

Instructor, BPSC252: Fieldwork Leadership and Safety Spring 2021
Uses weekly videos, reading and in class discussions to improve leadership and communication and enhance pre-fieldwork planning to create a more inclusive field experience for yourself and others. Seminar. 8 graduate students (new course)

Instructor, NASC093: Freshman Advising Seminar Fall 2020
Covers information on the exciting research and career opportunities available for degrees in STEM, time management, and setting academic goals. Lecture, ~24 freshman undergraduate students.

Instructor, BPSC250: Plant Biology Department Seminar Series Fall 2019
Required weekly seminar organized with invited speakers and student presentations. ~50 graduate students.

Instructor, BPSC240: Restoration Ecology Spring 2018
Examines fundamental and emerging ecological theories that can be successfully incorporated into ecological restoration and reviews emerging constraints to restoration ecology. Seminar. 6 graduate students (new course)

Guest Lecturer, EEOB 400 Introduction to Graduate Study in Biology (Yearly) 2021-2024
Provide strategies for communicating with faculty, setting mentoring, and networking

Guest Lecturer, UC Irvine Ridge to Reef Summer Institute Species Diversity & Data Exploration 2021
Gave a research presentation, lecture and data analyses lab as part of the summer institute "Using Environmental Data Science to Better Understand Climate Change" for 12 graduate students as part of an NSF Funded NRT

Teaching Preparation and Training

<i>Promoting Research Self-Efficacy to Facilitate Inclusion in Mentoring Relationships</i>	2024
<i>Scaffolding research for undergraduates: How to integrate a research deconstruction module in your introductory biology courses</i>	2024
<i>Empowering Students to Talk in Class: Instructor Discourse Moves that Support Student-Centered Teaching</i>	2023
<i>Inclusive STEM Teaching Project 8-week course</i>	2022
<i>University of California Fieldwork Toolkit Leadership Training Series. 4-sessions</i>	2021
<i>First Year Faculty Teaching Seminar Series. 5-sessions</i>	2018

MENTORING

Postdoctoral Scholar Advisor

Lachlan Charles (2019-2021)

PhD Advisor (7 Total, 4 complete)

Noah Teller (2017-2023), Stuart Schwab (2018-2023, co-advised Dr. G. Darrel Jenerette), Meg Kargul (2018-2023, NSF GRFP), Clarissa Rodriguez (2018-2023, NSF GRFP Honorable Mention), Ariana Firebaugh-Ornelas (2021-present, co-advised Dr. Marko Spasojevic), Samuel Loudon (2022-present), BryAnna Wertz (2022-present)

MSc Advisor

Krista Dugan (2022-2024), Dirk Plunkett (2023-present)

PhD Guidance Committee Member (17 total)

Jared Huxley (EEOB), Mystyn Mills (PLBL), Asma Ayyad (PLBL), Robert Straser (Entomology, ENTM), Tesa Madsen-Queen (EEOB), Clara Woodie (EEOB), Brooke Rose (PLBL), Jolene Saldivar (PLBL), Rebecca Keim (ENTM), Lauren Gedlinske (EEOB), Guadalupe Maldonado Andrade (PLBL), Michael Remington (EEOB/SDSU), Tobias Moyneur (ENTM), Miranda Buckley (EEOB), Matt Major (EEOB), Ria Ghosh (EEOB), Audrey Burr (EEOB)

PhD Candidacy Exam Member (21 total)

Dion Kucera (PLBL), Stephanie Piper (PLBL), Serj Danielian (EEOB), Mystyn Mills (PLBL, Chair), Robert Straser (ENTM), Jared Anderson-Huxley (EEOB), Clara Woodie (EEOB), William Ota (EEOB), Jolene Saldivar (PLBL, Chair), Brooke Rose (PLBL), Tesa Madsen-Queen (EEOB), Michael Rodriguez (Environmental Sciences, ENSC), Rebecca Keim (ENTM), Erin McCann (EEOB), Arik Joukhajian (Microbiology and Plant Pathology), Michael Remington (EEOB/SDSU), Ryan Hansom (EEOB/SDSU), Aral Greene (ENSC), Allyssa Richards (PLBL), Esbeiry Cordova-Ortiz (MPP), Ria Ghosh (EEOB)

PhD Dissertation Committee Member (11 total)

Holly Andrews (EEOB), Mystyn Mills (PLBL), Jared Anderson-Huxley (EEOB), Jolene Saldivar (PLBL), Brooke Rose (PLBL), Tesa Madsen-Queen (EEOB), Ryan Hansom (EEOB/SDSU), Rebecca Keim (ENTM), Erin McCann (EEOB), Michael Remington (EEOB/SDSU), Andrea Romero (PLBL)

Undergraduate Research Advisor (33 students, 9 Independent projects listed below)

Cien 'Jessica' Du (RISE, 2018-2019) Cindy Juarez (SBTR, 2018), Zachary Flores (2019-2020), Michelle Oritz (2019-2020, Mini Grant recipient), Erika Hernandez and Emily Munn (2019-2020), Cyrena Le (2021-2022, UCR Honors), Kyra Harvey (2022, GRaPEs, Virginia State University, 3rd place poster, Ecology), Matthew Gano (2022, NSF REU, Southern Adventist University, NSF Honorable Mention), Michael Carasco (2023), Rameen Shahzad-Ghajar (2023), Cynthia Franco Gonzalez (2024-present)

PRESENTATIONS: INVITED (since joining UCR)

- 2025 Post-fire restoration in chaparral. California Botanic Garden, Native Plant Festival
- 2024 Bridging science and practice: Understanding plant invasions to aid land management, University of California Riverside, Departmental Seminar
- 2024 Considerations when implementing prescribed burns: lessons learned from Southern California grasslands, University of California Santa Cruz, Seminar
- 2024 A collaborative approach to ecological restoration. Cal State San Bernardino, Departmental Seminar
- 2024 A collaborative approach to ecological restoration. University of Washington, Departmental Seminar
- 2024 Inclusive Teaching for Ecological Restoration. University of Washington, Special Seminar
- 2023 Valuing community increases awareness and impact of conservation science. LatinX and the Environment Symposium – Keynote speaker
- 2023 Plant invasions and plant-soil feedbacks within California grasslands. California Botanic Garden, Departmental Seminar
- 2022 Community partnerships increase awareness and impact of conservation science. Invited Presentation as part of the Early Career Fellow session at Ecological Society of America Annual Meeting
- 2022 Considerations when implementing prescribed burns: lessons learned from Southern California grasslands. Invited Presentation as part of Inspire session at Ecological Society of America Annual Meeting
- 2022 A demographic approach to managing grasslands. University of California, Davis, Departmental Seminar

- 2021 Disentangling the effect of multiple ecological processes on recruitment in an invaded annual grassland using a trait-based approach. Invited Presentation of Organized session at Ecological Society of America Annual Meeting
- 2021 A demographic approach to managing grasslands. University of Colorado, Departmental Seminar
- 2021 Disentangling the effects of small mammals on plant community structure. University of Wyoming, Departmental Seminar
- 2020 Disentangling the effects of small mammals on plant community structure. Smithsonian Environmental Research Center, Departmental Seminar
- 2020 Disentangling the effects of small mammals on plant community structure. University of British Columbia, Departmental Seminar
- 2019 Understanding invasion and invader impacts to guide restoration management. German Centre of Integrative Biodiversity, Departmental Seminar
- 2019 Invasive Species Management and Ecosystem Restoration – two sides of the same coin. California Invasive Plant Council Annual Symposium (Plenary speaker)
- 2019 Disentangling the effects of small mammals on plant community structure. Nanjing University, China, Special Seminar
- 2019 Disentangling the effects of small mammals on plant community structure. University of Oregon, Departmental Seminar
- 2019 A demographic approach to managing grasslands. Cheadle Center for Biodiversity and Ecological Restoration, University of California Santa Barbara, Departmental Seminar
- 2018 Conservation grazing in a California Grassland. Western Riverside County MSHCP
- 2018 Management within California’s spatially and temporally complex grasslands. Irvine Ranch Conservancy, Science Friday Seminar
- 2017 Disentangling the effects of small mammals on plant community structure in a California grassland. California State University, Fullerton. Departmental Seminar

PRESENTATIONS: CONTRIBUTED (since joining UCR; (‡graduate student/undergraduate/technician/postdoc mentee))

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- 2024 Firebaugh Ornelas, A.‡, Homyak, P., Jenerette, G.D., **Larios, L.** & Spasojevic, M. Understanding community responses to seasonal precipitation via seed banks. Ecological Society of America Annual Meeting [Presentation]
- 2024 Louden, S.‡, Charles, L.‡, Schwab, S.‡, Chesnut, J., Grinath, J., Bean, W.T., Brashares, J.S., Prugh, L., Suding, K.N. & **Larios, L.** Plant community responses to rodent seed predation and precipitation in a semi-arid Californian grassland. Ecological Society of America Annual

- Meeting [Poster]
- 2024 Kargul, M.‡ & **Larios, L.** Regeneration trait strategies and the timing of restoration efforts impact post-fire restoration success. Ecological Society of America Annual Meeting [Presentation] Organized Session: Advancing Shrubland Restoration: Innovations for Success
- 2024 Watkins, C., LaForgia, M., Bimler, M., Shoemaker, L., Shaw, E.A., **Larios, L.** & Hallett, L.M. Plant traits interact with functional groups to predict species interactions in California grasslands. Ecological Society of America Annual Meeting [Poster]
- 2024 Pulido-Chavez, M.F., Randolph, J., Stephens, E., Greene, A., Kargul, M. ‡, Saroa, S. ‡, **Larios, L.**, Homyak, P. & Glassman, S.I. Linking microbial resilience and ecosystem recovery a five-year study following a chaparral wildfire. Ecological Society of America Annual Meeting [Presentation]
- 2024 Shoemaker, L. and 19 others (including **Larios, L.**) Variability in species competition across environmental gradients determines. Ecological Society of America Annual Meeting [Presentation]
- 2024 Kargul, M.‡, Tyler, S.‡, & **Larios, L.** Time since fire impacts chaparral post-fire restoration success and seed bank recovery. Chaparral Symposium [Presentation]
- 2024 McCann, E., Franklin, J., Spasojevic, M. & **Larios, L.** Evaluating the efficacy of forestry plantations within Southern California chaparral. Chaparral Symposium [Poster]
- 2024 Tyler, S. ‡, Dugan, K. ‡, Covarrubias-Santillan, V., Spasojevic, M., Franklin, J., Rivard, T., Molinari, N. & **Larios, L.** Effects of Nurse Plant in Establishing Oak Seedlings. Chaparral Symposium [Poster]
- 2023 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Spatial heterogeneity after prescribed burns may promote invader re-establishment. IALE-North American Annual Meeting [Presentation]
- 2023 Kargul, M.‡ & **Larios, L.** Restoration in the face of altered disturbance regimes: wildfire and chaparral. IALE-North American Annual Meeting [Presentation]
- 2023 Harvey, K.‡, Rose, M.B. & **Larios, L.** Species Distribution Models Predict Expanded Habitat for Drought Tolerant Plants as Climate Changes. Emerging Researchers National Conference in STEM [Poster] 3rd Place Undergraduate Poster, Ecology
- 2023 Rose, M.B., Mills, M.W., Franklin, J. and **Larios, L.** Mapping Vegetation Cover Using UAV Imagery to Guide Restoration and Monitoring of a Rare Riparian Shrub Ecosystem in Southern California. Santa Ana River Science and Conservation Symposium [Presentation]
- 2022 Rodriguez, C.‡, Rose, M.B., Elías Velazco, S.J., Franklin, J., and **Larios, L.** Assessing the role of environmental niche shifts in facilitating the spread of *Brassica tournefortii*. California Invasive Plant Council Annual Symposium [Presentation] 1st Place Best Student Presentation

- 2022 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Prescribed burning may produce refugia for *Oncosiphon piluliferum*. California Invasive Plant Council Annual Symposium [Presentation] 2nd Place Best Student Presentation
- 2022 Rodriguez, C.‡, Rose, M.B., Elías Velazco, S.J., Franklin, J., and **Larios, L.** Assessing the role of environmental niche shifts in facilitating the spread of *Brassica tournefortii*. National Diversity in STEM Conference [Presentation]
- 2022 Kargul, M.‡ & **Larios, L.** Understanding the role of regeneration traits and strategies in post-fire recovery in Southern California shrublands. California Native Plant Society Conference [Presentation]
- 2022 Gano, M.‡, Schwab, S.‡ & **Larios, L.** Assessing the Variability of Root Resource Acquisition Traits in Response to Arbuscular Mycorrhizal Fungal Root Colonization in Grassland Plants. Center for Plant Cell Biology Research Experience for Undergraduates Symposium [Poster]
- 2022 Rodriguez, C.‡, Rose, M.B., Elías Velazco, S.J., Franklin, J., and **Larios, L.** Assessing the role of climatic niche shifts in facilitating the spread of *Brassica tournefortii*. Ecological Society of America and Canadian Society for Ecology & Evolution Annual Meeting [Presentation]
- 2022 Kargul, M.‡ & **Larios, L.** Understanding the role of regeneration traits and strategies in post-fire recovery in Southern California shrublands. Ecological Society of America and Canadian Society for Ecology & Evolution Annual Meeting [Presentation]
- 2022 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Post burn heterogeneity contributions to recruitment of invasive forb *Oncosiphon piluliferum*. Ecological Society of America and Canadian Society for Ecology & Evolution Annual Meeting [Presentation]
- 2022 Teller, N.‡ & **Larios, L.** Evaluating impacts of invasive plant management in designated Wilderness. Ecological Society of America and Canadian Society for Ecology & Evolution Annual Meeting [Presentation]
- 2022 Shoemaker, L. and 19 others (including **Larios, L.**). Persistence and coexistence in variable environments: Leveraging abiotic and biotic variation for ecological restoration and maintaining diversity. Ecological Society of America and Canadian Society for Ecology & Evolution Annual Meeting [Presentation]
- 2022 Le, C.‡ & **Larios, L.** Stinknet (*Oncosiphon piluliferum*) Germination Plasticity. UCR EDGE Symposium [Poster]
- 2021 Kargul, M.‡, Borowsky, A., Atit, K., & **Larios, L.** NetLogo: an online programmable simulation model for remote learning science lessons [Presentation]
- 2021 Munson, S.M., and 12 others (including **Larios, L.**). RestoreNet: an emerging dryland restoration network to increase revegetation success. Ecological Society of America Annual Meeting [Presentation]

- 2021 Aoyama, L. and 10 others (including **Larios, L.**) Diagnosing restoration trajectories using demographic modeling and modern coexistence theory. Ecological Society of America Annual Meeting [Presentation]
- 2021 Kargul, M.‡ & **Larios, L.** How regeneration vs adult traits shift across environmental gradients at different spatial scales during post-fire recovery in Southern California shrublands. Ecological Society of America Annual Meeting [Presentation]
- 2021 Randolph, J.W., Pulido-Chavez, M.F., Saroa, S.‡, **Larios, L.** & Glassman, S.I. Prescribed versus wildfires in California grasslands: Bacterial and fungal succession. Ecological Society of America Annual Meeting [Poster]
- 2021 Munson, S.M., and 12 others (including **Larios, L.**). RestoreNet: an emerging dryland restoration network to increase revegetation success. Society for Ecological Restoration [Presentation]
- 2020 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Prescribed burn post-fire heterogeneity may contribute to *Oncosiphon* spread. California Invasive Plant Council Annual Symposium [Presentation] 3rd Place Best Student Presentation
- 2020 Rodriguez, C.‡, Bean, T., McDonald, C.J. & **Larios, L.** Assessing chemical management options for the control of stinknet (*Oncosiphon piluliferum*). California Invasive Plant Council Annual Symposium [Presentation] 1st Place Best Student Presentation
- 2020 Kargul, M.‡ & **Larios, L.** Influence of regeneration traits and topography on initial post-fire recovery in a Southern California shrubland. Ecological Society of America Annual Meeting [Presentation]
- 2020 **Larios, L.** & Hallett, L.M. Demographic compensation influences persistence of perennial bunchgrass in a managed landscape with variable climate. Ecological Society of America Annual Meeting [Presentation]
- 2020 Rodriguez, C.‡, Sweet, L., Barrows, C. & **Larios, L.** Investigating the role of abiotic factors as drivers of invasion patterns in dryland annual plant communities. Ecological Society of America Annual Meeting [Presentation]
- 2020 Pulido-Chavez, M.F., Randolph, J.W., Greene, A.C., **Larios, L.**, Homyak, P., & Glassman, S.I. Fungal succession after wildfire reveals significant changes in fungal richness and composition in a California chaparral. Ecological Society of America Annual Meeting [Poster]
- 2020 Charles, L.‡, Chesnut, J, Grinath, J.B., Bean, W.T., Brashares, J.S., Prugh, L.R., Suding, K.N., & **Larios, L.** Functional diversity and grassland community responses to drought and small mammal pressures. Ecological Society of America Annual Meeting [Presentation]
- 2020 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Invader legacies: Spatial and temporal development of *Oncosiphon piluliferum* soil legacies differentially inhibit native forb performance. Ecological Society of

- America Annual Meeting [Presentation]
- 2020 Borowsky, A., Kargul, M.‡, Atit, K., & **Larios, L.** DroughtReach: Alleviating the Outreach Drought with Scientists in the Classroom [Presentation]
- 2020 Ortiz, M.‡, Kargul, M.‡, & Larios, L. The role of aspect type on one year post fire chaparral recovery. UCR Undergraduate Research Symposium [Poster]
- 2019 **Larios, L.**, Capocchi, J.K., Walters, K.E., Chung, J.A., Saroa, S.‡, & Glassman, S.I. Evaluating the impacts of a prescribed burn on soil communities in a California grassland. Society for Ecological Restoration SW Annual Meeting [Presentation]
- 2019 Schwab, S.‡, Jenerette, G.D., & **Larios, L.** Do *Oncosiphon piluliferum* soil legacy effects post-removal inhibit restoration success? [Presentation] 3rd Place Best Student Presentation
- 2019 Teller, N.‡ & Larios, L. Testing functional dispersion in revegetation seed mixes to reduce grass invasion in bulldozer fire breaks [Presentation]
- 2019 Charles, L. ‡, Maron, J.L. & **Larios, L.** Investigating the effects of small mammals and plant competition on native and exotic species within annual grassland communities [Presentation]
- 2019 Rodriguez, C.‡, Bean, T., McDonald, C.J. & **Larios, L.** Evaluating the efficacy of management options for *Oncosiphon piluliferum* (Stinknet)? {Poster] 1st Place Best Student Poster
- 2019 Kargul, M.‡ & **Larios, L.** Investigating shifts in post-fire plant regeneration strategies and functional traits in Southern California shrublands [Poster]
- 2019 Teller, N.‡, Gornish, E., Bean, T., & **Larios, L.** Competitive seeding in fire breaks to suppress postfire invasion in coastal sage scrub. Western Society of Weed Science Annual meeting [Presentation]
- 2018 Teller, N.‡, Gornish, E., Bean, T., & **Larios, L.** Competitive seeding in fire breaks to suppress postfire invasion in coastal sage scrub. California Invasive Plant Council Symposium. [Presentation]
- 2018 Hallett, L.M., Brambila, A., Farrer, E.C., **Larios, L.**, & Suding, K.N. Extreme climate events: They happen but how often do they matter? Ecological Society of America Annual Meeting [Presentation]
- 2018 Juarez, C.‡ & Larios, L. Soil microbial communities' impact on native and exotic plants. CNAS Summer RISE Symposium [Poster]
- 2018 Du, C.‡ & **Larios, L.** Seed dispersal along bulldozer lines and natural ecotones may facilitate exotic plant invasion. CNAS Summer RISE Symposium [Presentation]
- 2018 Teller, N.‡, Gornish, E., Bean, T., & **Larios, L.** Targeting bulldozer lines for postfire competitive seeding at Chino Hills State Park. California Chaparral Symposium: Global Change and the Vulnerability of Chaparral [Poster]

- 2018 **Larios, L.** & Hallett, L.M. Conservation grazing to manage *Stipa pulchra* populations. California Native Plant Society Conservation Conference [Presentation]
- 2017 **Larios, L.** & Maron, J.L. Small mammals influence functional diversity in California grassland plant. Ecological Society of America Annual Meeting [Presentation]

PRESS

- Lake Elsinore officials prepare for possible 'super bloom surge' of visitors - <https://abc7.com/lake-elsinore-officials-prepare-for-possible-super-bloom-surge-of-visitors/14507813/>
- Tread lightly to protect California's superblooms - <https://www.scribd.com/article/640774661/Tread-Lightly-To-Protect-California-s-Superblooms>
- Prescribed burns encourage foul-smelling invaders - <https://news.ucr.edu/articles/2023/05/23/prescribed-burns-encourage-foul-smelling-invaders>
- The no-tech way to preserve California's state grass - <https://news.ucr.edu/articles/2022/09/22/no-tech-way-preserve-californias-state-grass>
- Student org plants 240 trees at Southern California park - <https://insideucr.ucr.edu/stories/2022/04/20/student-org-plants-240-trees-southern-california-park>
- Highlanders mentor teens aspiring to STEM careers - <https://insideucr.ucr.edu/stories/2022/08/09/highlanders-mentor-teens-aspiring-stem-careers>
- UCR ecologists work toward post-fire rebirth of healthy landscapes - <https://news.ucr.edu/articles/2022/05/10/ucr-ecologists-work-toward-post-fire-rebirth-healthy-landscapes>
- UCR Ecologist Receives Ecological Society of America Fellowship - <https://news.ucr.edu/articles/2021/04/23/ucr-ecologist-receives-ecological-society-america-fellowship>
- Invasive Species' Effect on Kangaroo Rat Habitat - <https://www.youtube.com/watch?si=UcTQATNjBcht5TQK&v=5ZEfcuU7Fbw&feature=youtu.be>
- Pretty looks can be deceiving – <https://www.fws.gov/story/2021-06/pretty-looks-can-be-deceiving>
- Riverside hosts influential invasive plant conference for the first time - <https://ucrnrs.ucr.edu/news/2019/10/25/riverside-hosts-influential-invasive-plant-conference-first-time>

SERVICE

Professional Service

Coordinating Editor, Restoration Ecology June 2020 - Present
Reviewer. Grants/Funding: Panels: National Science Foundation-NSF (2),
 USDA-NIFA (1) *Ad hoc reviewer:* NSF (4), USDA (1)
Scientific Journals: 16 professional journals (26 manuscripts reviewed).
Participant, Planning Committee IALE-North American Annual Meeting
 2021-2023
Symposium Organizer, "Playing chess: Climate-driven changes in species
 distribution within hard conservation boundaries: Challenges for
 Habitat Conservation Plans" IALE-North American Annual Meeting 2022
California Representative, Society of Ecological Restoration Southwest
 Chapter Sept 2018-2022
Member, UC ANR's Sustainable Natural Ecosystems Initiative Panel Feb
 2022-present
Participant, UC ANR RREA Logic Model Planning Group Dec-April 2019

Campus Service

Co-Director, CNAS [CUSP](#) (Career Mentoring of Underrepresented STEM
 Students for the Professoriate) Oct 2022-present
Co-Director, CNAS [BB2P](#) (Building Bridges to the Professoriate) Mar 2023-
 present
Member, College of Natural and Agricultural Sciences Faculty Mentoring
 Program, [ARA](#), Working Group 2022-present
Member, University of California Riverside Associate Vice Chancellor for
 Diversity, Equity, and Inclusion Search Committee 2021-2022
Member, Center for Conservation Biology vision committee, 2017-2019

Departmental Service

Member, *Evolution, Ecology & Organismal Biology*, Faculty Search
 Committee 2024-2025 (hired 2 faculty)
Member, UC Riverside's Plant Biology Undergraduate Program Advisory
 Committee 2024-present
Member, UC Riverside's Plant Biology Graduate Program Advisory
 Committee 2023-2024
Member, Botany and Plant Science, Faculty Search Committee 2022-2023
Chair, Botany and Plant Sciences, Diversity, Equity and Inclusion Committee
 Jul 2020-2024
Member, UC Riverside's Plant Biology Graduate Program Advisory
 Committee 2017-2020

SERVICE TO LAND MANAGEMENT COMMUNITY

Presentation, Southern California Forests and Watersheds Program Board of
 Directors, 2023
Presentation, Santa Ana River and Orange County Weed Management Area Fall
 Symposium, 2023
Presentation, University of California Cooperative Extension Stinknet
 Symposium, 2023 – 3 presentations, 2 given by graduate students

Presentation, Santa Ana River and Orange County Weed Management Area Spring Symposium, 2023 – 2 presentations given by graduate students

Presentation, Santa Ana River Science and Conservation Symposium, 2023 – presentation given by graduate student

Participant, Natural Communities Coalition Ecological Health Assessment, 2022-2023

Participant, Riverside County Habitat Conservation Authority, 25th anniversary of RCHCA film series, 2021

Participant, Technical Advisory Committee San Francisco Estuary Institute Riverside Urban and Historical Ecology Study, 2020-2023

Presentation, United State Forest Service Holy Fire Symposium, 2020 - presentation given by graduate student

Presentation, RCHCA Reserve Managers Coordinating Meeting 2020 - presentation given by graduate student

Presentation, San Diego Management and Monitoring Program 2020 - presentation given by graduate student

Consultant, San Bernadino Water Conservation District, Riparian restoration project

Presentation, RCHCA Governing Board 2019

Fieldtrip Lead, Evaluating the ecological effects and management options for Stinknet, Cal-IPC Annual Symposium Field Trip 2019

Presentation, Western Riverside County Biological Monitoring Program 2018

SYNERGISTIC ACTIVITIES

Panel Participant, California Forum for Diversity in Graduate Education, 2024

Chair, Riverside County Science and Engineering Fair: Scientific Review Committee, 2022-present

Co-Organizer, STEM Solutions Week STEP Summer Learning Lab, 2022-2024

Guest Speaker, SEEDS UCR Chapter 2023

Panel Participant, Las Profes Panel UCR Chicano Student Programs, 2021-2023

Faculty Mentor, UCR Society for Restoration Ecology Student Chapter 2021-present

Panel Participant, Career Panel California Invasive Plant Council Annual Meeting 2020

Faculty Mentor, DroughtReach UCR STEM Outreach Program to K-12 2019-2023

Faculty Mentor, UCR Graduate Student Mentoring Program 2018-2020

Faculty Mentor, UCR GradEdge Journal Club, 2018, 2020

Keynote Speaker, Riverside Unified School District-Inspire Her Mind STEM Conference 2019

Volunteer, UCR Plant Discovery Day 2018, 2019

Guest Speaker, Southern California Ecosystems Research Program. California State University Fullerton 2017, 2018

joined UC Riverside

Coordinator, Diversity Roundtable Discussion at ESPM Graduate Student

Conference, 2012

Co-Organizer, UCB ESA SEEDS chapter's Undergraduate mentoring program,
2011, 2012.

Planning Committee, ESA SEEDS Western Leadership Meeting, April 2010

Alumni Mentor for SEEDS, ESA Annual Conference, Pittsburgh, PA, August 2010

SOCIETY MEMBERSHIP

California Invasive Plant Council
California Native Plant Society
Ecological Society of America
Society of Ecological Restoration