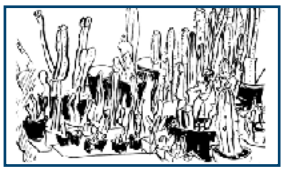
The Aggie Brickyard

assembling the blocks of ecology at UC Davis

SPRING 2025 VOL. XV

THIS OR THAT
GET TO KNOW OUR NEW GGE/JDPE CHAIRS

IN THE FIELD
FUNNY PHOTOS AND ANECDOTES



ART & POETRY
YOUR RESEARCH IN HAIKUS

LOOSE BRICKS
MAD LIBS AND MORE

CARPE DAVIS!

Photo by Megan McDaniels

A Burmeister's anole (Pristidactylus scapulatus) warming itself in Parque Nacional San Guillermo, Argentina. There are many endemic lizards found in this protected desert, and they must withstand extreme temperature fluctuations.

- COVER: ***"The Real Tern-wives of Stratton Island, Maine", Photo by Kay Garlick-Ott***

LETTER FROM THE EDITORS

Carpe diem, seize the day! It is easy to seize the day when the sun is shining, the birds are singing — when everything is going right and well. But, what do we do when it feels like the tide has turned?

Welcome to our 15th issue of the Aggie Brickyard, in which we encourage you to embrace what remains bright despite the darkness, steadfast against the changing tide. As Editors, we made it our goal to search tirelessly for those silver linings, and we hope you'll agree that we found them in humor, shared musings, and creativity within our beloved GGE community. As you peruse this issue, please enjoy our friendly "This or That" comparison of GGE interim chair, Robert Hijiman, and JDPE chair, Jeremy Long (pg. 3), accompanied by their letters that showcase the joy in uniting as a Graduate Group and the connections between our GGE students and staff in Davis and San Diego. If you want a laugh (and don't we all need one these days?), turn to our "Fun in the Field" section (pg. 7) with fieldwork anecdotes and photos, get inspired by the poetic descriptions of your peers' work in their Research Haikus (pg. 11), rope your friend into a GGE-themed Mad Lib (pg. 14), or take on the scavenger hunt to find treasured moments with your GGE community (pg. 16). And, of course, do check out the issue's incredible art and poetry section (pgs. 11-13) — we really can't get over how talented our graduate group is!

This year, our community faces one of its biggest challenges yet — a complete assault on what we believe in: the process of science, the value of equity and inclusivity, the expectation that we treat others with kindness and respect. It is in times like these that we must double down on our core values, look out for another, seek joy and share it with others. In this issue, we hope to do just that for you and your loved ones, to strengthen the fabric of human connection within our community and plant a seed so that you may feel empowered to do the same!

Sincerely,
Your Aggie Brickyard Editors

Caroline Bingley: "Shocking. How shall we punish him for such a speech?"
Elizabeth Bennet: "We could always laugh at him." From, Pride and Prejudice (2005)

MEET YOUR NEW CHAIRS

Our Dynamic Duo: Robert Hijmans & Jeremy Long

Lijmen |lɛi̯.mə(n)|
verb

Dutch, To glue or join, to convince or win over.

Lijmans |lɛi̯.mə(n)s|
noun

GGE slang, A combination of Dr. Hijmans and Dr. Long, the chairs of the GGE and JDPE that glue or join our students and staff together at Davis and San Diego!

THIS			or		THAT
☑	☐	GGE		☐	☑ JDPE
☑	☐	Davis		☐	☑ San Diego
☑	☐	Agriculture & Ecological Modeling		☐	☑ Plant Herbivore Interactions
☑	☐	Geography		☐	☑ Biology
☐	☑	Sweet		☑	☐ Salty
☑	☑	Burgers		☐	☐ Hot Dogs
☐	☑	Beach		☑	☐ Mountains
☑	☐	Lake		☐	☑ Ocean
☐	☐	Winter		☑	☑ Summer
☑	☐	Coffee		☐	☑ Tea
☐	☑	Dogs		☑	☐ Cats
☑	☑	Vacation		☐	☐ Staycation
☑	☐	Lab Work		☐	☑ Fieldwork
☐	☐	Drake		☑	☑ Kendrick Lamar
☑	☐	ECL 200A/200B		☐	☑ BIO 645/745
☐	☐	TV Shows		☑	☑ Movies

Robert Hijmans (GGE)

Six months have passed since I had the honor of stepping into the role of chair for the Graduate Group in Ecology. Getting to know so many of you has been the highlight of my year. The positive energy and enthusiasm I've encountered from students, staff, and faculty have given me a renewed spring in my step.

When I took on this role, my primary goal was simply to keep calm and carry on. I focused on learning the ins and outs of how the GGE functions, while letting the reconciliation task-force to do its important work. Although we are still in the midst of that process, it's been very encouraging to witness such strong motivation and dedication to improving our program. I'm genuinely excited about what lies ahead—not because I expect dramatic changes overnight, but because I believe that we will make steady progress in enhancing the way we work.

This isn't to say that challenges won't arise. In fact, conflicts are a part of any group—especially one as large and diverse as ours. But our strengthened sense of community will help us navigate these challenges more effectively and with greater understanding.

We have about 140 students and 100 faculty members and we rely on the commitment of each and every one to help create the best possible environment for learning and research. While our size offers incredible opportunities, understanding the diversity in interests and viewpoints isn't always easy. I believe it's important that we take more time to connect through informal gatherings and conversations. One opportunity I'm particularly looking forward to is the weekly post-seminar happy hour—an excellent chance for us to meet, chat, and strengthen our bonds. I look forward to seeing many of you there.

Jeremy Long (JDPE)

A few years ago, I received an invitation to speak at the California Islands Symposium. Given the meeting's focus, "Islas de Esperanza", I agreed to give a talk that used a "hopeful theme" to present our research examining all of the ways in which humans were severing marine-island connections. Things were fine until I actually sat down to prepare a hopeful talk about human impacts. What had I done? Where could I find hope when talking about such a grim subject? Fortunately, my hope quest revealed several human interventions that likely did restore marine subsidies to islands including the Marine Mammal Protection Act, the Endangered Species Act, and successful eradications of introduced mammals from islands.

So when the Aggie Brickyard editors asked me to deliver a hopeful and uplifting director update in the face of overwhelming uncertainty, fear, and loss, reflecting on that talk reminded me of two things. First, and with apologies to Rihanna, we can find "hope in a hopeless place". Second, now more than ever, searching for examples of hope can inspire us.

Jeremy Long (JDPE) continued

Because our program is a joint program between Davis and SDSU, our students must be accepted by both universities, spend a year at Davis, and use at least two email accounts. Some of this effort was lost when our JDP students received diplomas only issued from UCD. But, our institutions finally began issuing joint degrees last year. It's a small thing, but a big deal. Woohoo!!!

Moving to and from Davis in their second year of study represents a significant challenge for our JDP students. But they often overcome this challenge by seeing it as an opportunity rather than an obstacle. At Davis, our students take classes with pioneers and leaders in ecology (I always wish I could have taken a class with Rick Karban). At Davis, they become friends and colleagues with amazing UCD students. At Davis, our students incorporate geographic components into their research. At Davis, they collaborate with awesome Bodega Marine Lab faculty. As an example of making the most of that year, one of our third year JDP students, Liz Becker, used her Davis year to develop a manuscript based on critical feedback she received on her analysis she presented in an ECL 290 course run by Louie Yang and Neil Willits. Her manuscript has been published in Restoration Ecology. Carpe Davis, indeed!

Our students are required to form Qualifying Exam Committees made of faculty from both institutions. This previously required at least one faculty member to travel across several degrees of latitude to the other institution, thereby incurring significant travel expenses, losing faculty time for other activities, and unnecessarily increasing carbon emissions. Thankfully, recent changes have allowed JDP students and their committees to minimize exam travel. This change has been warmly welcomed by our graduate group and both institutions.

I have found hope in our Davis colleagues that support our students and treat them as their own. Thank you to the numerous Davis faculty that helped our students by serving on a committee or incorporating them into your labs/research programs. I would like to express special gratitude for the support provided by Robert Hijmans and Angie Nguyen. Your leadership and organization are remarkable.

The grandfather of marine subsidies and former Davis faculty member, Gary Polis, encouraged ecologists to quit looking at their feet and to consider what was happening in surrounding habitats. As we defend science and the environment while staying active in research and also trying to improve our programs, it's hard to know where to look for hope. However, I encourage you to take a moment to look for hope in each other, because doing so has absolutely inspired me.

STUDENT PUBLICATIONS

Caspi, T., Serrano, M.G., Vanderzwan, S.L., Kessler, J., Schell, C.J., & Sacks, B.N. (2025). "Impervious surface cover and number of restaurants shape diet variation in an urban carnivore." *Ecosphere* 16(1): e70152. https://doi.org/10.1002/ecs2.70152

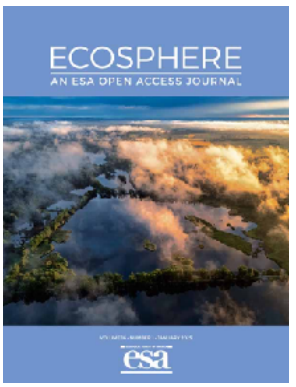
Fleming, M., Bell, A., Rakoto Harison, H., Herrera, J., Duthie, A.B., Kramer, R., & Rakotonarivo, O.S. (2025). "Impact of price shocks and payments on crop diversification and forest use among Malagasy vanilla farmers." *Biological Conservation* 302: 110915. https://doi.org/10.1016/j.biocon.2024.110915

Hernandez, M. (2024). "Plant-soil relationships of the Mojave Desert's iconic Joshua tree: Developing a fungi(de) to restoration." Guest Blog Post. *Mojave Desert Land Trust*. https://www.mdlt.org/blog/plant-soil-relationships-of-the-mojave-desert

Pozzi, T., Legg, E., McCullough, S., & Lubell, M. (2024). "Transformative climate change education for graduate students: developing a theory of change to increase equity in climate change science." *Environmental Education Research*: 1–21. https://doi.org/10.1080/13504622.2024.2411310

Rivera, B.J., Meilan, R., & Jenkins, M.A. (2025). "Patterns in selfed seed production and germination in Amur honeysuckle (*Lonicera Maackii*)." *Invasive Plant Science and Management*: 1-30. https://doi.org/10.1017/inp.2025.5

Winsemius, S., Babcock, C., Kane, V.R., Bormann, K.J., Safford, H.D., & Jin, Y. (2024). "Improved aboveground biomass estimation and regional assessment with aerial lidar in California's subalpine forests." *Carbon Balance and Management* 19:41. https://doi.org/10.1186/s13021-024-00286-w



Caught on Film (Field Photos)

Reporting live from the field…check out these photos and anecdotes from GGE grad students completing their fieldwork! Sometimes we laugh, sometimes we cry, and sometimes it's both, but the experience of gathering data and getting up close to our study sites and species is one of the best parts of being researchers and students.

Photos by Jennifer Cribbs, clockwise from top left:

- ***This intrepid van was our home during field season 2023 in Yosemite National Park. We named her Valerie the Van, and despite being an older model UCD van, she made it to the top of the road to Sawmill Mountain after a very exciting ten miles on a rutted and overgrown forest service road.***
- ***Introducing the LEAF-C (Lightweight Extendible Appendable Foliage Cutter)! This custom built tool is so slim and lightweight it's hard to see in the picture, but it allowed us to lasso and cut needles that were out of reach (up to about 6-7m above the ground).***
- ***A savory field invention: Mountain House and Backpacker's Pantry meals can't compete with our homemade backpacking meals like this chicken masala curry with dried fruit chutney and wild onion garnish.***

Photos by Rosealea Bond.

Photos from juvenile steelhead sampling in the Scott Creek Estuary (Santa Cruz Co.) completed in October 2024. A major goal of the study is to investigate fine-scale movement and habitat use in a bar-built estuary using JSATS acoustic telemetry. Sampling involved seining, sorting, and tagging lots of juvenile steelhead.

Photo by Ben Rivera.

I made a new friend on the dunes.

Photo by Sage Madden.

Alia Tu, a field assistant for my research on a local songbird (Project Phoebe), stands in shallow water after using our custom-built, very high tech equipment—a lighted mirror duct taped to a telescoping pool pole—to check the contents of a bird nest.

Photo by Amanda Wong.

Collecting soil using paper bags and glass jars for plastic pollution research.

The Bioanalyzer Bop

By Tatum Bernat

I was having trouble with my labwork, specifically with an instrument called a Bioanalyzer which can tell you about the quality of your RNA or DNA. I had to do several months of troubleshooting trying to figure out what was wrong with our Bioanalyzer, and it was oftentimes demoralizing. To boost morale, our lab technician (Ashley De La Torre - now a PhD student at OSU) and I wrote a short silly song to coerce our instrument to work. Whether the solution was the song or the o-ring from the priming station is anyone's guess...

♪♪ ***"Bioanalyzer Bop"*** ♪♪

We know that you're not mean,
you probably need a clean.

We need some RNA,
preferably today.

For you to analyze,
we offer you a smize! :)

****then must give a large smile****

Baby (Bird) Talk

By Sage Madden

I study a songbird that nests locally on human structures. One of our nests last year was located in the locked bathroom at McKinley Park in Sacramento--the city parks folks would come by to let us in each week. The first time two parks staff members let us in, one of them asked my undergraduate field assistants what exactly we were up to. I had walked over to the bathroom with the other one, and we walked back over right as one of the field assistants replied that we were "measuring babies" in the bathroom, forgetting to add the rather important context that we were taking quick measurements of baby birds, not baby humans. Seeing the startled and slightly horrified look on the staff member's face, I quickly explained. Needless to say, the undergrads and I had a chat after that about handling interactions with members of the public.

A female Black Phoebe bringing food to her nest full of chicks on Mrak Hall in Summer 2024. Her nest was monitored as part of my research, Project Phoebe, in 2024. Photo by undergraduate team member Lee Howell.

An Unexpected Introduction

By Sara Winsemius

During field work in the subalpine of Kings Canyon NP in 2018, my labmate Emily, her field tech, and I hunkered down under some trees during an afternoon thunderstorm. It wasn't letting up, so we quickly gathered the rest of the data and scampered down the mountain. Because the water level in the river was high due to the rain, we crossed the river pants-less. When we arrived back at our camp, a JMT backpacker had set up camp with our tents to weather the storm. He seemed to regret popping out of his tent to say hi! Sure enough, though, the rain let up and we all enjoyed the stunning double rainbow (wow wowwww so intense!).

Art and Science

Research Haikus

Several of our GGE students have written haikus to tell you the story of their research. It's notoriously hard for academics to be brief but they managed to sum up their research in just 3 lines and 17 syllables, and give it some poetic flair! If you're inspired by their words, ask them more about what they study- maybe they'll wax poetic with more details!

Amanda Wong

Plastic pollution
In the ocean and humans
What about the plants?

Kyra Gmoser-Daskalakis

Restoring wetlands
For birds, fish, flies, is done by
People, politics

Tara Pozzi

Flooding, drought, and heat
Collaborate, Progress, Yield
Goodbye what once was

Sophia Pelletier

[Leopard Shark (*Triakis semifasciata*)]

The benthic swimmer
riding on the crests and troughs
draws perfect circles

Jennifer Cribbs

Old pine worn by wind
twisted trunk tells tales of trials
written in resin

A wind-sculpted sugar pine in Sequoia and Kings Canyon National Parks. Photo by Jennifer Cribbs

Best Wishes to California Bay-Delta Fishes

by Jasmine Manny

Stuck in a loop of rapid change,
Severe deviations brought on by hominids,
Meanwhile the anadromous salmonids—
endure lots of pain,

Impaired olfaction in the brain,
and loss of habitat range.

Steelhead are one of the freshest of the team,
Colder flows allow for better O_2 exchange,

They too, swim through an urbanized maze,
But they are not alone in paying for massive agricultural gain.

Rain, Rain, Rain,
Chinook, steelhead, and others get down with the Yolo Bypass,
As long as those rice fields inundate—
let them drive past,
Allowing fish to live, grow and not die fast.

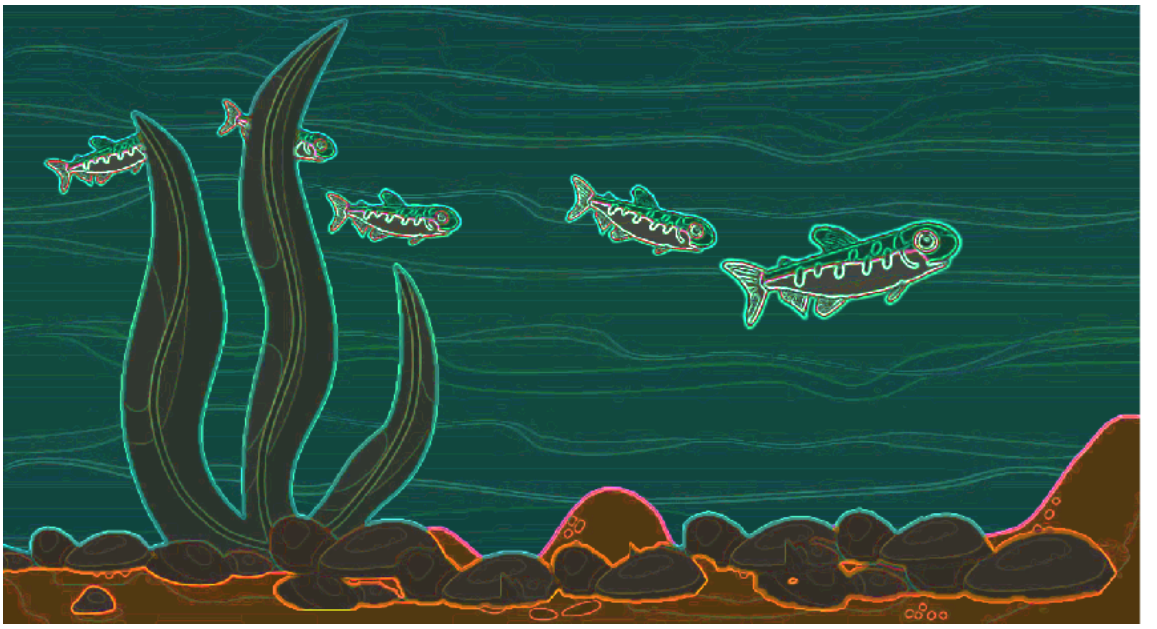
Yet mercury and pesticides taint the sediment,
Perhaps contamination of benthic by-catch,
will be a definite impediment.

Salmonids are no strangers to struggle,
Before ever spawning,
Their parents endure the physiological puzzle.

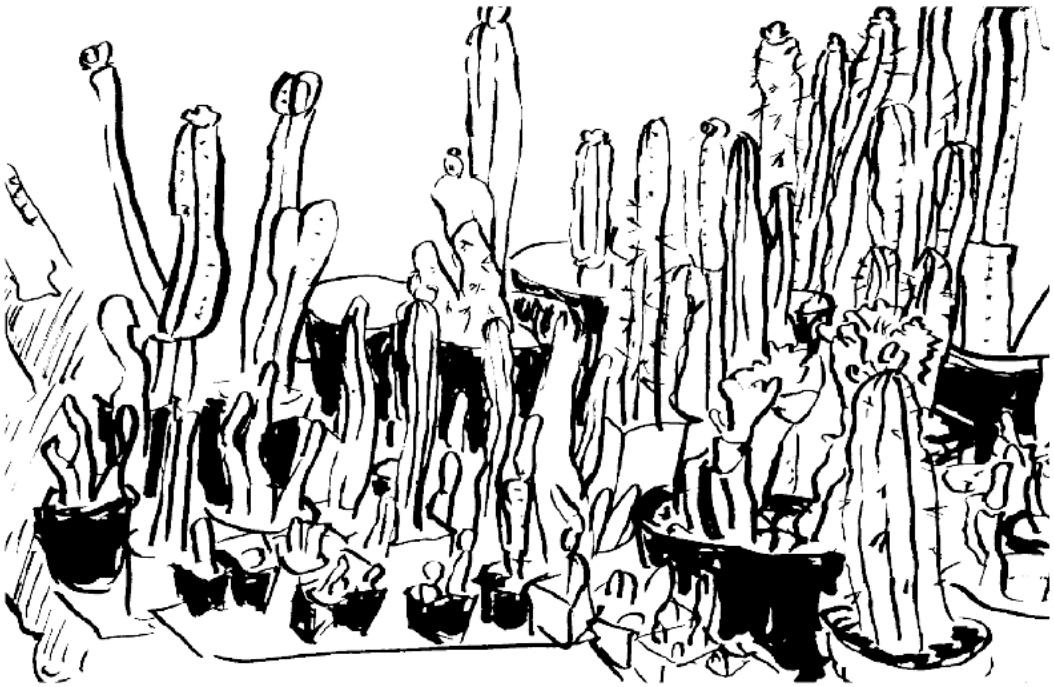
In all this environmental adversity,
By adopting various developmental durations,
Fish populations,
Try to produce enough life history diversity.

Humans called upon as evolutionary peers,
Must try to prevent the dwindling of food webs in future dry years,
Collectively racing the climate change clocks,
Reconciliation and stewardship can help us save fish stocks.

Through more access to functional flows and building a healthy phenotypic portfolio,
We hope that more fishes rebound like the Snohomish Coho.



Illustrations by Zoe Wood



Tommy's San Pedro Collection, Tucson AZ

Diana's Plushie Collection, Millinocket, ME

Mad Libs

by Kay Garlick-Ott

Mad Lib 1 — A Silly Seminar

Student 1: "Hey _____ [GGE student name], wait up!"

Student 2: "Oh, hey _____ [GGE student name]. Are you coming from the GGE seminar?"

Student 1: "Yeah. I couldn't miss _____ [GGE professor]'s talk on the effects of _____ [noun, environmental phenomenon] on _____ [noun, study species or system]."

Student 2: "Wow! Sounds _____ [adjective]. I haven't been to seminar in _____ [number] weeks."

Student 1: "You should go! You never know what you might learn. Last week, I heard _____ [GGE professor or student name] introduce their _____ [adjective] theories for why bats _____ [verb]."

Student 2: "You *would* like that, wouldn't you. I'm TA'ing this quarter though, and my sections happen at the same time."

Student 1: "Boo. Well, you're missing out! You should at least come to GGE Happy Hour afterwards. Last week, I heard that _____ [GGE student name] drank _____ [number] Thai Breakers and _____ [verb] around Davis until _____ [number less than 12] AM!"

Student 2: "That's crazy! I would never. I'll be at SoCo's movie night next week, though. We're seeing _____ [movie name]. I'm so _____ [adjective]!"

Student 1: Nice! I'll be there too. I guess I'll see you there!

Student 2: _____ [way to say goodbye]!

Mad Lib 2 — Funny Field Memories

Day #_____[number], _____[location]

_____[GGE student name] sat in her _____[year] Civic, watching the _____[plural animals] as they _____[verb]. This was her last field season, and she was _____[adjective, emotion] to think about not returning to her field site any more. As she collected her last data points, she thought about some of the adventures she had over the years. Like that time the _____[field equipment] broke and she had to jerry-rig a _____[same field equipment] using _____[noun, type of object] and _____[noun, type of object] from her _____[type of related person, e.g., friend, sister, husband]'s _____[type of related person, e.g., friend, sister, husband]'s _____[type of related person, e.g., friend, sister, husband]. What a _____[adjective] time.

And now, here she was. About to graduate with her PhD in _____[scientific discipline within Ecology]. Or at least, that was the plan. She could still remember what _____[GGE Professor] said to her during her qualifying exam: "_____[same GGE student name from above], you should consider improving the study design of your _____[ordinal number] chapter." Now, she knew why they had suggested that, though there was no way she could have anticipated the _____[adjective] _____[acute environmental phenomenon] that overtook her season this year. And when she returned, she would have _____[number] months to write up her results before she graduated.

Looking at her study species one last time, _____[same GGE student name from above] sighed. She _____[emotive verb] her work. The _____[adjective] _____[time of day, plural] spent in the field. It was time to move on. But who knows? Maybe there would be more opportunities to do field work at her next job as a _____[job title] at the _____[animal or plant] Conservation Agency.

Scavenger Hunt by Kyra Gmoser-Daskalakis

THE AGGIE BRICKYARD

Photo by Megan McDaniels

Vicuñas, the smaller wild relative of alpacas, are a South American camelid that are threatened in some areas of their range. They are vulnerable to disease, especially in areas near livestock, and experienced a catastrophic population collapse in the high Andean desert of Parque Nacional San Guillermo, Argentina. Researchers from UC Davis, Centro Científico Tecnológico Argentina, Funcdación Rewilding Argentina, and New York University are collaborating to understand how this widespread trophic cascade is impacting the sensitive montane community.

WANT TO GET INVOLVED?
COMMENTS OR CORRECTIONS?

brickyardeditors@gmail.com

https://aggiebrickyard.github.io/