

From: [Max Boykoff, ENVS Director](#)
To: [Kayla Jones](#)
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Alumni Newsletter

Message from Director Max Boykoff

Editor's Note: Max Boykoff is a Professor in Environmental Studies and a Fellow in the Cooperative Institute for Research in Environmental Sciences (CIRES); Max has been Director of ENVS since July.

Welcome to the newly-revived ENVS Alumni Newsletter! Our ENVS Program in the College of Arts & Sciences is a community of scholars focused on the multiple dimensions of environmental change through integrating scientific understanding of human-environment interactions, practical responses to environmental problems, and the values that shape our decisions and behavior.

The history of the environmental studies program at CU Boulder has deep roots that can be traced to 1951 with the establishment of a Conservation Education major, available through the then-joint Department of Geography and Geology here on campus. The Conservation Education program evolved to include more scientific dimensions, and in 1972 became an Environmental Conservation major with about 100 students; it rapidly grew in the 1980s and 1990s to over 500 majors. With growing and maturing interest in other issues that intersected with conservation—and bolstered by a motivated student population at the time—Environmental Studies became its own program in 1993. Jim White, the founding director of ENVS (and now Dean of the College of Arts & Sciences)

Environmental Studies Statement on Systemic Racism

The murder of George Floyd has shone a brighter light on the prevalence of systemic racism in America in 2020. The killing has invoked millions across the world to protest and stand up in opposition to injustices toward people of color. It is inducing long overdue and difficult conversations surrounding systematic racism. Last summer the Environmental Studies program released a statement condemning systemic racism, and also acknowledged the

worked hard to secure more resources for the program. Vocal support and demonstrations by ENVS students in front of Old Main helped provide student pressure as well.

We have continued to grow and increase our capacity to carry out our work. Now in 2020, many wonderful ENVS graduates make up an extensive network of alumni working around the world. On campus we are a community of nearly 1100 people, including:

- about 800 [undergraduate majors](#),
- 51 MS and PhD [graduate students](#),
- 151 [Professional Master's \(MENV\) students](#),
- 49 ENVS and [Professional Master's \(MENV\) faculty](#) and staff,
- a 6-person ENVS [advising team](#), and
- 24 ENVS [Research Associates](#) and [Faculty Associates](#) and mentors.

large disparities for minorities within academia. We have long known that our collective well-being necessitates actions of allyship with oppressed communities and individuals. The Environmental Studies program condemns the act of racism, and we have committed to confront systemic racism through our ongoing work.

[You can find the full statement here.](#)

We in ENVS at the University of Colorado Boulder are privileged to be able to devote large chunks of our days working on environmental challenges. We appreciate that with that privilege comes responsibility and purpose. We have many accomplishments to celebrate, but there is much more work to do.

To illustrate our collective efforts, what follows in this Newsletter are brief spotlights on fellow alumni, current students, faculty, and staff, as well as teaching, research, and events. We also provide additional information about our fundraising and other announcements.

If you're an ENVS alum and you're not yet in touch but want to learn more about our ongoing work, send us an email at ENVStudies@colorado.edu to start a conversation. And if you're on Twitter, start following us @CUBoulderENVS.

Enjoy our newsletter!

Warm regards,

Max Boykoff



What have you been doing? — A snapshot of 25 years of ENVS Alumni in the World

Editor's Note: Dale Miller joined the ENVS faculty in 1999 and has acted in several roles in the program over the

Dale Miller



years. He was serving as Associate Director for Undergraduate Studies during the 25th Anniversary year of the program in 2018, and felt that milestone provided an opportunity to conduct a survey of ENVS Alumni who had earned their bachelors degree during those years. Below is a brief overview of what was learned from former students. A link to a more complete document is at the end of this article.

In 2018, I surveyed the 3,182 alum who had earned the ENVS Bachelor of Arts (B.A.) degree since the program had begun at CU Boulder in 1993 (an ENVS Honors student, Will Downie, worked with me and included questions for his thesis project related to outdoor education and leadership training). The survey asked what folks have been doing since graduation and for reflections on their experiences while an ENVS undergraduate, the value/utility of the ENVS degree, and suggestions for refining/improving the ENVS degree given current workplace demands.

We sent an invitation to participate in an online survey via email to approximately 2550 alumni, with 676 ENVS alumni (26%) completing the survey. The earliest graduation date among the responses was 1994, with about 3/4 of the responses coming from alumni who graduated after 2005, and about 1/2 of responses coming from alumni graduating 2011–2017. Of the 676 respondents, 51% identified as female and 49% as male; age at graduation ranged from 19–51 years, with the average being about 22 years; responses by year of degree lumped into three groups: 15% in 1992–2001, 38% in 2002–2011, and 46% 2012–2017.

Now, of even more interest: About 73% of respondents had a job related to their ENVS degree since graduation; 78% were working full time, 8% part time, 10% were getting more education, and 1% were retired or raising a family. As for what sectors folks were working in, about 48% worked in for-profit organizations, about 15% each were in the public sector, education, and non-profits, while 7% were self-employed.

We asked about additional education: Overall about half had continued their education at some point, earning Master's degrees & PhDs, education/other professional degrees, law degrees, and medical degrees.

We asked about skills folks used in their careers and learned the most common are oral/written communication skills (~90% used these), then leadership skills, then data analysis, lab or field skills, and about 44% used policy analysis skills.

We asked about perceptions of the value of the interdisciplinary ENVS B.A.: 81% somewhat or strongly agreed with the statement: "ENVS trained me to

understand problems and solutions in a way distinct from my contemporaries in other areas of study.” We went on to ask folks to rank from 1 (not at all)–5 (very much so) whether each of the areas of their interdisciplinary ENVS education—natural science, social science, policy, and values— “has played a valuable or important role in my career” and found each was approximately equally important or valuable, ranking them all approximately 4 out of 5.

We also asked, “When you left CU Boulder with your ENVS degree, did you feel confident and prepared as you entered graduate school or the workforce.” About 58% felt confident, and 53% felt prepared. So, we asked if there was “something that ENVS could have offered that would have made you feel more confident and prepared.” About 5% said nothing would have made them feel more confident and prepared; but, of the remaining folks, 75% would have liked more career development assistance, 43% would have liked more graduate school advice, and 35% wrote in special courses or skills that would have better prepared them. All very useful information.

Much more was learned in the survey, some of which you can look at by clicking on the link below for a more complete presentation and analysis of these data with many more graphs: [View survey results here](#). Some of what was learned was put to use with a new leadership class, we also continue work on career development. Overall, I was excited about all I learned about what alumni have been doing, and about reconnecting with them; I felt proud to be associated with ENVS and all the folks who have made it a great place, alumni, current students, faculty, and staff.

ENVS Course Spotlight – Environmental Leadership Course

Editor's Note: Sharon Collinge joined the ENVS faculty in 1998 and served as Director from 2012-2016. Dr. Collinge has served as the Chief Scientist and Observatory Director for the NSF-funded National Ecological Observatory Network (NEON) and was just elected President of the Ecological Society of America.



Says Professor Sharon Collinge: "ENVS students are 'actionists'—they are highly motivated to lead positive change in the world by working directly on problems outside the boundaries of a university classroom. And they also have a strong desire to participate in real-world projects that facilitate learning and practice of student leadership."

In Fall 2019, Professor Collinge developed a new upper-division course entitled, “Leadership for Environmental Sustainability,” to help connect knowledge with action for local environmental issues. The 26 juniors and seniors in this project-based course worked with community members, non-governmental organizations, and public agency staff on projects ranging from

community stewardship in Boulder Canyon to urban forestry strategies to address the Emerald Ash Borer crisis. These projects were designed to increase understanding of vital human-environment issues affecting the Boulder region, and to foster productive and inclusive conversations about these issues.

Students worked in teams to collaboratively create a strategic plan for each project. Assignments throughout the semester built upon one another to provide all of the elements necessary for a strong strategic plan, including frequent conversations with community partners, visioning, and budgeting. In November 2019, the students' presented their polished, professional plans at a public event that showcased their work with community members.

The community partners were grateful for the students' products and were really excited about how useful the plans will be for their continued efforts. And the students benefited as well. To illustrate, one wrote, "I am very thankful for this class and the experience it has given me. It was very empowering to be included in projects involved in the greater Boulder community, and seeing our ideas have real potential other than a grade."

ENVS Alumni Spotlight



Bridgit Kodenkandath (2016)

This Environmental Studies alumni spotlight focuses on Bridgit Kodenkandath (ENVS BA 2016). Bridgit is a clean-energy professional who has worked in the hydroelectric, energy efficiency, and solar sectors across the country, building on her experience in policy, program management, and business development. Bridgit focused her undergraduate studies on renewable energy, then after graduating, she earned a fellowship with Women of Renewable Industries and Sustainable Energy (WRISE).

Bridgit now volunteers as the co-chair for the New York City Chapter of WRISE, where she helps host webinars, luncheons, networking events, helping women get involved in the clean energy sector, adding, "The WRISE - NYC LinkedIn page will have more information about what we do, including lunch and learns (now [webinars](#)), [happy hours](#) (also now virtual), and [general support of the industry](#), especially women who want to break into the renewable industry."

Currently, Bridgit works for EnterSolar as a Senior Business Development Analyst in New York City helping develop Commercial & Industrial solar projects for corporate clients. At Enter Solar, she supports origination efforts by synthesizing solar design engineering, financial modeling, and policy research

to develop the best strategy to help companies go solar. She is always happy to talk with other buffs!

ENVS Student Spotlights

ENVS Undergraduate Student - Ellie Stanton



Ellie Stanton is a third-year undergraduate student at the University of Colorado Boulder seeking degrees in both Environmental Studies and International Affairs, in addition to a minor in Atmospheric and Oceanic Sciences. During her freshman year, she founded the University of Colorado Political Science Review to strengthen student understanding of political processes and current affairs. As Chief Editor, she supports students in their writing process from idea conception to the final edits. Additionally, Ellie produces editorial pieces to broaden student understanding of the political dynamics of climate change.

In her sophomore year, Ellie served as president of the Environmental Studies Club. In this position, she led a group of ENVS students in hosting documentary showings, field trips, and a successful used clothing drive. She currently serves as the undergraduate representative to ENVS faculty meetings, in which she speaks for student interests, desires, and demands.

In her free time, Ellie rock and ice climbs, mountain bikes, and skis with other members of the CU Alpine Club. After graduation, Ellie hopes to pursue a degree in environmental law to uphold corporate and government accountability in climate protection.

ENVS Graduate Student - Denise Fernandes



Editor's Note: Denise Fernandes is a fourth year PhD candidate in ENVS, and a Graduate Part Time Instructor in the Program for Writing and Rhetoric (PWR). She works on energy landscapes and transitions, climate and environmental justice, and the reproduction of inequalities and power hierarchies during energy explorations, generation, and transmission and its impact on vulnerable and marginalized communities.

My research looks at power hierarchies around energy landscapes and transitions under the larger climate change governance framework. For my dissertation, I am studying the financialization of the solar transition within capitalism through dispossession and the exploitation, and the facilitation of green imperialism in Morocco and India. Besides the theoretical

understandings of energy and climate change, I wanted to also study the interdisciplinary potential of energy politics and so teamed up with Shelby McAuliffe, a photographer and MFA student at CU Boulder, to visually articulate the cultural politics of hydraulic fracturing in Colorado. The project was interesting for us both to look at ways and means through which we could highlight the interactions of environmental impacts and change, livelihoods, and regulations around a rather contentious topic while also trying to bring about a conversation through our artwork amongst the different individuals invested in petrochemicals in the state of Colorado.

[You can learn more about this topic here.](#)

MENV Graduate Student - Vasco Chavez-Molina



Editor's Note: Born and raised in Lima, Peru, Vasco Chavez-Molina is an early career conservationist interested in international conservation and environmental policy. Vasco has had experience working across Latin America, Africa, and the U.S., with particular emphasis on wildlife conservation, protected area management, and illegal wildlife trade.

In 2016, I had the opportunity to travel to Tanzania to conduct wildlife management research in the Tarangire-Manyara region under the supervision of Dr. Christian Kiffner from the School for Field Studies. After four years of evaluating quantitative data on wildlife population densities in a multiple use area, we finally published our research, entitled, "[Long Term Persistence of Wildlife Populations in a Pastoral Area](#)," in the *Journal of Ecology and Evolution*.

Our research was groundbreaking because it put long-held assumptions about East African conservation to the test. First, our data suggest that long-term coexistence between wildlife and livestock is possible. Second, our quantitative analysis on wildlife population densities from 2003-2019 demonstrated that the Manyara Ranch multiple use area supported higher densities of wildlife species than the adjacent National Parks (Lake Manyara and Tarangire National Parks). This was a shocking result for East African conservation, as national parks had long been assumed to be the most effective conservation areas.

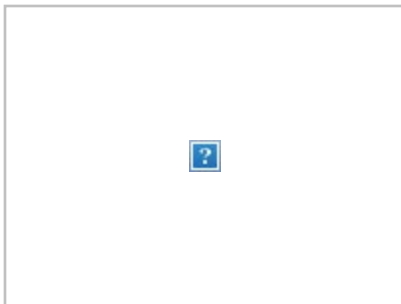
Publishing this research while pursuing my master's degree in the MENV program enables me to contextualize my findings within the environmental, social, and institutional systems of international conservation. From the start, my work in the environmental policy specialization has focused on international environmental work. Conducting this research inspired me to continue down this path by pursuing a capstone project in "Impact Investing to Reduce

Deforestation” in the Amazon Rainforest, as well as conduct an independent study with ENVIS Assistant Professor Cassandra Brooks on marine protected areas in Antarctica.



We utilized line distance sampling along 20 transects to estimate wildlife densities within Manyara Ranch. (photo credit: Vasco Chavez-Molina)

ENVIS Faculty Research Spotlight - Professor Jill Litt



Jill Litt in a community garden

Editor's Note: The central focus of Professor Jill Litt's research is the connection between neighborhood environments and health, and how physical features (e.g. design, amenities, services), natural features, and social factors at the neighborhood scale influence health and mental well-being. In addition to her contributions here at CU Boulder, Dr. Litt is an Associated Researcher at the Barcelona Institute for Global Health (ISGlobal).

I have been at the University of Colorado since 2001 and have the honor of working across three of the four campuses of CU — Anschutz, Denver, and Boulder, teaching and researching at the nexus of environment and human health. My career journey started in Baltimore, Maryland, at the Johns Hopkins University School of Public Health, where I earned my undergraduate and graduate degrees. I moved to Boston to carry out a postdoctoral fellowship at the Boston University Medical Center, then landed in Colorado. Currently, I am completing a fellowship funded by the European Commission and based in Barcelona, Spain, at ISGlobal, a global health research institute.

My work at CU has provided me flexibility and many opportunities to innovate in the classroom, and in the community through research and practice. I have been particularly interested in understanding how environmental and social structures support health and well-being. Through a grant from the American Cancer Society, for example, we have been carrying out a randomized controlled trial of community gardening to understand how participating in community gardening improves diet and physical activity and reduces stress and anxiety. Results will be forthcoming in May 2021.

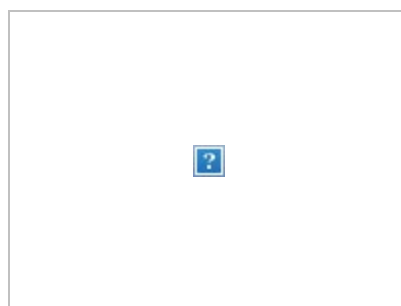
In January 2021, we will launch a five-year study entitled RECETAS (Re-

imagining Environments for Connection and Engagement: Testing Actions for Social Prescribing in Natural Spaces), which will test a novel nature-based social prescribing intervention among populations in Spain, France, Czech Republic, Finland, Ecuador, and Australia. We will work with care providers in a variety of medical and social settings to evaluate the impact of non-medical socially supported and nature-based referrals to reduce loneliness. The study was selected for funding by the European Commission's Horizon 2020 funding program.

You can [read and discover more information about RECETAS here](#), and [visit here for more information about the community gardens RCT](#).

ENVS Activity Spotlight – Assistant Professor Cassandra Brooks

Editor's Note: Cassandra Brooks joined the ENVS faculty in 2017 as an Assistant Professor. She draws on multiple disciplines including marine science, environmental policy, and science communication to study and seek solutions to pressing environmental problems. Prior to joining CU Boulder, she completed a PhD at Stanford University, studying international ocean policy, with a focus on marine protection in the Antarctic.



"We feel small and humble, yet in Antarctica I feel like a part of something large - teeming with wildlife." (Cassandra Brooks)

Cassandra Brooks, recently completed a three-week trip to Antarctica with the Homeward Bound Project—a groundbreaking global women's leadership initiative. Brooks' has worked in the Antarctic for the last fifteen years, across the realms of marine science, media and outreach and environmental governance. Her prior work contributed to the adoption of the world's largest marine protected area in the Ross Sea, Antarctica. Most recently, with the Homeward Bound Project, Brooks' work in the Antarctic now includes teaching and leading women from across the world.

The [Homeward Bound Project](#) is a ten-year initiative to foster women's leadership in the science, technology, engineering, math and medicine (STEMM) fields. With the tagline, "Mother Nature needs her daughters," the Project's goal is to train 1000 women in STEMM to heighten the influence of women making decisions that shape our planet. Brooks was part of the science faculty for the fourth cohort of women in the program—this cohort comprised 99 women, ages 23-70, representing 33 countries. Among the women on the ship were biologists, chemists, surgeons, innovators, and science communicators. Brooks was among twelve faculty members who worked together to teach leadership, visibility, strategy, and science. Brooks explained the tagline saying, "The idea of the program is that if we actually have more diversity in leadership—more women and more representation of voices from across the world—then we will have a better chance of sustaining

Earth and humanity.”

Giving Back & Staying in Touch with Environmental Studies

Partnership Opportunities

We would love to hear from you! We are interested in what you are doing—if you care to share it—or what other fellow ENVS-ers are up to. You can give back to ENVS with opportunities for undergraduate and/or graduate student internships or job leads, or through mentoring or career-development opportunities. Please contact us at ENVStudies@colorado.edu to learn more.

Funding Opportunities

We have developed and continue to raise funds for several awards and scholarships to benefit graduate and undergraduate students in ENVS. We feature five opportunities below that range from long-standing scholarships to a brand new one. If you are able, please contribute in support of current and future ENVS students. We invite you to share these funding opportunities with friends and family if they are interested in supporting our ongoing programming. [The full list of ENVS Award & Scholarship opportunities is available on our website here.](#)

Colorado Impact Scholarship

This scholarship provides funds for undergraduate students enrolled in ENVS who are the first generation in their family to attend college, and those from socioeconomic backgrounds that are historically underrepresented in the field of environmental sciences. Preference also is given to students matriculating from secondary education in the state of Colorado. [You can donate to this scholarship here.](#)

Diana R. Nemergut Memorial Graduate Scholarship

This scholarship provides support for graduate students working on questions in the areas of environmental microbiology and ecological sustainability in ENVS at the University of Colorado Boulder. This was established in memory of Diana Nemergut, a former ENVS faculty member who had a lifelong commitment to science. [You can donate to this scholarship here.](#)

Rocky Mountain Community Bridge Scholarship (coming soon)

This scholarship supports non-traditional students from the Rocky Mountain Region who are underrepresented in ENVS, creating pathways for students who historically have not chosen CU Boulder and ENVS, and to increase retention once students enroll. The fund can support 2-year scholarships, outreach, and a community center. Preference is given to non-traditional

undergraduate students already in the program or coming to ENVS, including community or other college transfers, students of color, First Nation students, LGBTQ+ students, older students, veterans, or students with children or other family members under their care. For more information about how to support this fund, contact ENVStudies@colorado.edu.

Radford Byerly, Jr. Award in Science & Technology Policy

This award supports an ENVS CU Boulder graduate student with a demonstrated commitment to making a significant contribution to science and technology policy in his, her or their work in academia, state, local, or federal government service, the private sector, voluntary organizations, journalism and the media, or some other form of public service that advances the role of science and technology in service to society. [Please support the Radford Byerly, Jr. award here.](#)

ENVS Red Cross Red Crescent Climate Center Fellowship Program

This fellowship focuses on improving environmental communication and adaptation decision-making as well as disaster prevention and preparedness in the Humanitarian Sector. ENVS has partnered with the Red Cross Red Crescent Climate Centre (RCRCCC) to place graduate students in locations in Southern/Eastern Africa each summer to help understand and address climate risks. This collaborative program connects humanitarian practitioners from RCRCCC – an affiliate of the International Federation of Red Cross and Red Crescent Societies – with graduate student researchers in ENVS who are interested in science-policy-humanitarian issues. [Please donate to Red Cross/Crescent projects here.](#)

ENVS & MENV Events

Events

Discussion on Institutional Racism in STEM

On September 30, Environmental Studies hosted a virtual "Discussion on Institutional Racism in STEM" with key involvement from two ENVS faculty and one graduate student attended by over two hundred people. The event was co-organized by [Ms. Kadidia Thiero](#), who is the (SOARS) (Significant Opportunities in Atmospheric Research and Science) Program Lead at UCAR (University Corporation for Atmospheric Research), [Matthew Druckenmiller](#), CIRES (Cooperative Institute for Research in Environmental Sciences), and [Max Boykoff](#), ENVS and CIRES.

The event was held by the [AAAS](#) (American Association for the Advancement in Science) [Colorado Local Science Engagement Network](#) and was co-sponsored by the [Environmental Studies Program](#), [Inside the Greenhouse](#),

[Western Colorado University](#), and [CIRES](#).

Panels discussed institutional racism in STEM (science, technology, engineering, and mathematics) education, research, and culture in the United States and then in Colorado. Among the panelists were ENVS [Assistant Professor Karen Bailey](#) and [ENVS PhD student Holly Olivarez](#).

The panelists focused on two main considerations:

1. confronting how anti-racist actions emanate from STEM research, teaching and engagement in the U.S.; and how to foster dialogue in Colorado and make progress at the science-policy interface; and
2. strengthening science, policy, and societal networks as resources to discuss pressing challenges that require evidence and science-based information, shared through trusted and equitable processes.

The work continues. [Find out more about the event here](#) and [watch the recording online](#).

ENVS & MENV Publications

Editor's Note: Below are three new publications that illustrate some of the interdisciplinary research we have recently completed in our ENVS community. Of course, this is not an exhaustive list, but they help show collaborations in different spaces and places.

Art/Science Experience for Interspecies Friendship and Survivability

From ENVS Faculty Associate Beth Osnes (Associate Professor of Theater & Dance)



Under a bridge on Discovery Drive, there is a population of barn swallows who swoop from

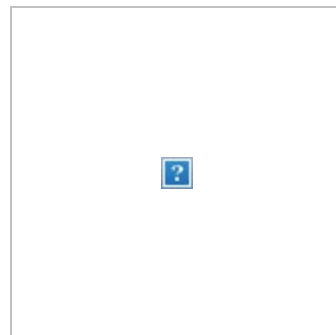
Faculty & Honors Student Collaboration

From ENVS Assistant Professor Matt Burgess & ENVS Professor Roger Pielke, Jr.

Matt Burgess, John Shapland (former ENVS honors student), Justin Ritchie (University of British Columbia) and Roger Pielke, Jr. (ENVS Professor) published a paper in Environmental Research Letters entitled "[IPCC baseline scenarios have over-projected CO2 emissions and economic growth](#)". The paper showed that the IPCC's

Green Communication and China

From ENVS Faculty Associate Phaedra Pezzullo (Associate Professor of Communication).



ENVS Faculty Associate Phaedra C. Pezzullo

their nests beneath the bridge to catch bugs to feed their chicks. Seven high-school aged young women—social distancing and masked—leisurely write poems and sketch the birds' flight and note their behavior as a way of coming to know the more-than-human world. From these, multi-person puppets of local birds are created and performed in Boulder's Open Space Mountain Parks.

[Here you can view CU's Inside the Greenhouse and SPEAK.WORLD collaboration.](#)

high-emission scenarios have been over-projecting CO2 emissions, because economic growth and coal growth have been slower than these scenarios projected, a divergence that will likely widen throughout the century, they argued. The paper and earlier preprint have been covered by the [Wall St. Journal](#), [Forbes](#) and other outlets.

published a co-edited book on environmental communication in and about China. Called "courageous" and "groundbreaking," Green Communication and China: On Crisis, Care, and Global Futures (MSU Press, 2020) moves between historical analysis of key concepts such as "wilderness" and the "sublime" to contemporary public opinion polling on climate attitudes and ENGO organizing through new media.



Twitter

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