November 28, 2022

Dear GDPE Community,

Welcome back from what I hope was a lovely break from classes and other duties. Some challenging events have happened, too. I can't address them all, but I want to say that I stand with the LGBTQ+ community. I know many of us are struggling after the attack last week in Colorado Springs. President Miranda provided some useful resources for folks wanting additional support. Love is love!

While I took much of last week off, my reading included these guidelines for healthy global collaborations. Collaborating well and respectfully is so important to our work - the paper is definitely worth reading.

Moving on to GDPE more directly - We have lots of classes next semester listed below, including my new class: Insect Ecology (class times MW 10, Th 9). Insects play crucial roles in most ecosystems, and their biology is fascinating - please sign up! Speaking of insects, Maria Chavez is defending her dissertation about using insect frass in agriculture. With a week off, and lots to report on, this is a long newsletter - read on down for all the details!

Best,
Ruth

GDPE EVENTS & ANNOUNCEMENTS
GDPE Graduate Student Town Hall Meeting
December 1st at 5:30 pm in Morgan Library RM 203 and on Zoom

Please join your fellow graduate students in our upcoming hybrid GDPE Town Hall Meeting. Your GDPE Student Representatives from the Executive Committee, DEI Committee, Social Committee, Graduate Student Council, and SciComm have come together to organize this opportunity for the GDPE community to gather and discuss the various things happening within GDPE. This will be a chance for all the reps to share what has been discussed and decided on within each committee, receive feedback from the student body, and discuss any future ideas and plans. We are hoping to make this a regular event for our community and we would love for you to join. We will be providing food!

If you are interested in coming by, or have any questions/concerns that you would like to discuss, please RSVP here.

Following the Town Hall we will be gathering for a GDPE Happy Hour at The Atrium.
Save the date for FRSES!
The Front Range Student Ecology Symposium (FRSES) will be hosted at the Lory Student Center **February 23-24, 2023**, with opportunities for all undergraduate and graduate ecology researchers. We are accepting abstracts beginning this **Tuesday, November 1st**. Our keynote speaker will be **Dr. Danielle Ignace**, an ecophysioligist, science communicator, and an advocate for Indigenous voices in STEM. Find out more about Dr. Ignace at her website [https://frses.org](https://frses.org). For more event information and to get involved, check out our website [https://frses.org](https://frses.org) and follow us on Twitter [@CSU_frses](https://twitter.com/CSU_frses).

Symposium registration and abstract submission are now LIVE on the [Front Range Student Ecology Symposium website](https://frses.org)! FRSES is a great place to find community and share your research with a local audience. We look forward to seeing you all there!

---

**2023 FRSES Call for Judges**
The 29th Annual Front Range Student Ecology Symposium (FRSES) will be held February 23-24, 2023! [FRSES](https://frses.org) is run by and for early career ecologists in the Front Range. Its mission is to celebrate and share the excellent research produced by local ecology students at all levels, from undergraduates to PhD candidates.

**Will you consider volunteering as a judge to support students at FRSES?** Please indicate your interest and availability by filling out this short form: [https://forms.gle/KaYpELy3BKv5pTg9](https://forms.gle/KaYpELy3BKv5pTg9). As we approach the event, we will send out more details. Presenters will include graduate and undergraduate students. The poster session will be held in the afternoon of the 23rd. Oral presentations will take place in 1.5 hour shifts on February 24th. Contact: Nick Parker  [Nick.Parker@colostate.edu](mailto:Nick.Parker@colostate.edu) FRSES Day-of Committee for more information.

---

**Defense Seminars**

**PhD Defense Seminar**

**Maria Chavez**

*The impact of insect frass on vegetable crop production*
ECOLOGY & CSU EVENTS

GSC and ASCSU Grants
Graduate Student Council (GSC), The Graduate School, and the Associated Students of Colorado State University (ASCSU) are excited to sponsor Professional Development & Supply grants open to all graduate and professional students for use prior to June 30, 2023. More information here.

Important GTA Information
First-Time Graduate Teaching Assistant Training Registration is Open!
The Spring 2023 required online training for newly appointed Graduate Teaching Assistants (GTA registration is now open. The training will be offered January 9-15th. This Training Program includes online content that addresses universal teaching issues and introduce students to best practices in pedagogy. Content is focused on explaining modeling best practice strategies. Because not all best practice strategies are readily applied in all classroom settings, the training emphasizes informing GTAs about the strategies while emphasizing the need to choose and adapt strategies according to disciplinary needs and departmental expectations. GTAs who will be teaching for the first time in Spring 2023 and those who missed the training in the Fall are required to complete this training.
If you are serving as a GTA for the first time please complete this mandatory training. Register on the TILT website. (https://tilt.colostate.edu/grad-students/gta-training/) Please complete registrations by January 2nd.
If you have any questions, please contact Debora Colbert at 970-491-2645 or Debora.colbert@colostate.edu.

COURSES

Spring 2023

ECOL 592 Interdisciplinary Seminars
Please note: Students are welcome to take multiple 592s in a semester.
* ECOL592 001 Vertebrate Climate Change Responses (Dr. Cory Williams)
- **ECOL592 003** Continuation of Fall 2022 ECOL 610 Project (*Dr. Joe von Fischer*)
  CRN: 15033 Credits: 1 Please register for 1 credit only.

- **ECOL592 004** Transdisciplinary Approaches in Sustainability: principles & practice (*Dr. Joe von Fischer*) CRN: 10127 Credits: 1 Please register for 1 credit only.

- **ECOL592 002** Assessing the Genetic Status of US Endangered Species Act-listed Species (*Drs. Chris Funk, Brenna Forester, Sean Hoban*) CRN: 10126 Credits: 1 Please register for 1 credit only.

- **ECOL592 005/FWCB 696** Ecological Science Writing (*Drs. Dan Preston and Kevin Bestgen*)
  CRN: 10128 Credits: 2 Note: this course is a 2 credit course

*Keep checking back for new ECOL 592s*
AGRI 638 - Ecosystem Service on Agricultural Lands
3-credit online course that applies an economic lens to look at buying and selling ecosystem services. Students will learn about ecosystem services, but focus on how farmers, ranchers, and other extensive land users can find ways to increase returns through marketing resources on their agricultural properties. Examples include hunting, agro-tourism and selling carbon credits. We will dig deep to explore innovative potential. All students will create an ecosystem marketing plan on an actual farm, ranch or other appropriate properties. Taught by Dana Hoag

ECOL and AB 581A2 - Insect Ecology
Insects play crucial roles in most ecosystems, and their biology is just fascinating - come learn all about them in this new experimental course taught by GDPE Director Ruth Hufbauer. 3 credits, 10-10:50 MWF.
ECOL Lecture CRN: 21553; AB Lecture CRN: 21102

Divergent impacts of crop diversity on caloric and economic yield stability
Environmental Research Letters
November 2022

Using a national data across a 40 year time period, GDPE student Sam Leuthold and team analyzed the relationship between caloric and economic yield stability and crop diversity at the state level. They found that increasing crop diversity helped to stabilize the economic yields of farmers, but decreased overall caloric yield stability.
Compensatory recruitment unlikely in high-elevation amphibian populations challenged with disease
Journal of Applied Ecology
October 2022

GDPE student Bennet Hardy with Dr. Larissa Bailey and Dr. Chris Funk found that demographic processes at high elevations likely limit the ability of boreal toad populations to persist in the presence of a deadly infectious disease. Their study highlights the importance of long-term monitoring and emphasizes the need for studying inter-population variation in natural systems.

A Long Way toward Climate Smart Agriculture: The Importance of Addressing Gender Inequity in the Agricultural Sector of Guatemala
Land
August 2022

GDPE Student, Clara Mosso, in this study analyzed the barriers and opportunities for the implementation of gender-sensitive CSA strategies in rural Guatemala, a low latitude country with a high gender gap index. Results suggest that women in rural Guatemala are frequently excluded from climate information access, agricultural training, and decision-making spaces in which agricultural resource management strategies are defined. They argue that this exclusion represents a barrier to the improvement in adaptation capacity and resilience and that gender inequity should be addressed to implement successful gender-sensitive CSA.
The Importance of Livestock Demography and Infrastructure in Driving Foot and Mouth Disease Dynamics

Kendra Gilbertson and Lindsay Beck-Johnson in the lab of Dr. Colleen Webb have found that the transboundary animal foot and mouth disease (FMD), poses a significant and ongoing threat to global food security. Their results suggest that demography is a key ecological driver of outbreaks and is critical for making robust predictions.

Let us know about your recent publications!

We are trying to highlight the great and diverse science that our faculty and students are doing. If you have recently published an article, please fill out the form linked below and our SciCom Fellow, Elizabeth Diaz-Clark, will add you to our new Recent Publications section above. We can also feature your work on our website!

All paperwork: Please email forms to Dawn at ecology@colostate.edu to coordinate signatures and processing. Thanks!

We want your feedback! Do you have comments or suggestions about how your GDPE experience can improve? Let us know! Contact your ExCom Student Representatives, Mel Morado and Erin Weingarten to provide your feedback.

Stay in touch by tagging GDPE in your posts and photos on Twitter - @CSU_Ecology and use hashtags #GDPE and #CSU_Ecology. We’d be happy to help highlight your research!

GDPE Social Listserv - Please make sure to sign up here for the GDPE Social Listserv to keep up with all the fun events we have planned this year!

Submit Photos

We want your photos! What are you up to, how is your field and lab work? Share them with us here.

GRANTS & JOBS

Assistant Professor of Quantitative Population Ecology
Review of applications begins December 5
The Utah State University Department of Wildland Resources and the Ecology Center are seeking applications for a full-time, 9-month tenure-track faculty position in quantitative population ecology. The position, to be filled at the Assistant Professor level, will be 50% research, 40% teaching, and 10% service. More information here.

Ph.D. Opportunity in Ecosystem Ecology and Biogeochemistry
Application closing date December 5
The Templer Lab seeks PhD students to join our lab at Boston University beginning in fall 2023 in the areas of ecosystem ecology, biogeochemistry, forest ecology, global change biology, and climate leadership. Applicants should be independent and highly motivated with academic research and/or field experience in plant ecology, soil ecology, climate, and/or nutrient cycling. More information here.

Early Career Scientists Synthesis Working Groups
Application closing date December 16
A call for Early Career Researcher Synthesis Working Groups (ECR) and Modular Synthesis Projects (SynFlex)
With this call, we specifically encourage proposals that engage genuinely with topics and researchers from under-represented regions. More details here.

Spectral Ecology Summer School (SPEC School)
Application closing date December 23
SPEC School will introduce participants to concepts in ecological remote sensing and inclusive leadership. Participants will get hands on experience with field spectroscopy, imaging spectroscopy, lidar, and other data products from the National Ecological Observatory Network. In addition, major foci of the course are justice, equity, diversity, and inclusion in scientific research and on developing leadership skills for academia and beyond. The in-person component of the course (June 18-24, 2023) will emphasize active learning with field data collection, group leadership activities, and research projects, while lectures will be held online in the months leading up to the field week. More information here.

Rocky Mountain Conservancy & Rocky Mountain National Park Continental Divide Research Learning Center
2023 Call for Bailey Fellowship Research Proposals
Application closing date February 1
The RMNP Bailey Research Fellowship is an endowed program of the Rocky Mountain Conservancy that is funded by the Leslie Fidel Bailey Charitable Trust. It is designed to encourage highly qualified graduate students to apply their talents to conducting research in the national parks. It is also intended to convey the importance of communicating park research to the public. More information here.

Submit Job Announcement