



GDPE Weekly Digest



January 10th, 2022

Dear GDPE Community,

It's January 2022 and the dawn of another year is upon us. Most of us probably have mixed feelings about the past year – varying from “I am glad it's over” to “I thought it would never end” to “I can't believe it went by so fast”. But to start the new year off right, let's begin with a science-based bit of new ecological knowledge that will cause many to exclaim “I knew it!”. Fast forward 6 months from now and many of us will be outdoors in the long evenings. And if you are fortunate to be with a group of friends, some will complain that they are “mosquito magnets” and others will proclaim smugly (this would be me) that mosquitos seldom bother them. A new study sheds light on why this is the case. You can read the preprint here -

<https://www.biorxiv.org/content/10.1101/2022.01.05.475088v1>. And, spoiler alert, you who are “magnets” for this unpleasant species interaction (from the human perspective at least) will feel some vindication in learning that there is indeed a scientific basis for what the authors of this study describe as your “mosquito-magnet human skin”.

Alan Knapp
Your GDPE Senior Ecologist

GDPE EVENTS & ANNOUNCEMENTS

PhD Defense Seminar
Jesse E. Gray
Plant Species Codominance: Using new perspectives to reveal patterns hidden in “plains” sight

January 18, 2022
9:00 AM MST
Teams: <https://bit.ly/3qYOLui>



ECOLOGY & CSU EVENTS

The Front Range Student Ecology Symposium needs your presentation!

FRSES is a student-run symposium at Colorado State University that provides an opportunity for students doing research in ecology to showcase their work and network in a friendly and supportive peer environment. This year's conference will be held in-person Wednesday - Thursday, February 23-24, 2022. Oral and poster presentations will be scheduled throughout Thursday. You can present your research at any stage of development, from proposed to completed research. Undergraduate and graduate research welcome! We have limited capacity this year for both oral and poster presentations. We will consider abstracts on a first-come-first-served basis.

Abstracts will be accepted until **January 21, 2022** at 6pm and are limited to 1350 *characters*. Follow this [link](#) to submit an abstract. If you have questions about FRSES or submitting your abstract, please email ecosym@rams.colostate.edu For more information, check out our website, <https://frses.wordpress.com/>

DEADLINES

GDPE Deadlines

none currently

Other Deadlines

Feb. 2 – by Noon (MT)

- Request for Change of Department and/or Degree Program (GS7) for SPRING 2022

Feb. 11 – by 4:45 pm (MT)

- SPRING 2022 GRADUATES – Deadline to Apply to Graduate
 - Deadline for Application for Graduation GS25 Form (students applying to graduate for the first time) OR Reapplication for Graduation (students who have applied to graduate for a previous term). Access the form on **RAMweb**.

Find all of the deadline details on the CSU Graduate School's website [here](#).

Find all of the registration details on the CSU Registrar's website [here](#).

COURSES

Upcoming Courses of Interest

ECOL 592 Interdisciplinary Seminars

Please note: Students are welcome to take multiple 592s in a semester.

◆ **ECOL592 001 "Overpopulation and Ecological Sustainability "** (Dr. Philip Cafaro)

CRN:18824 **Credits: 1** *Please register for 1 credit only.*

◆ **ECOL592 002 "Plant-soil feedbacks and drought"** (Dr. Melinda Smith, Carina Donne, Alex Siggers)

CRN 10126 **Credits: 1** *Please register for 1 credit only.*

◆ **ECOL592 003 "Understanding the ecological impacts of drought from drought experiments"** (Dr.

Alan Knapp) CRN 15033 **Credits: 1** *Please register for 1 credit only.*

Terrestrial Ecosystem Isotope Ecology (SOCR670) Spring 2022

Instructor: Francesca Cotrufo

Are you curious to know what isotopes are and how they naturally behave in terrestrial ecosystems biogeochemistry? Do you want to know if isotope methods can help you addressing your research questions? Do you want to gain practical skills measuring C, N and water stable isotopes concentrations and analyzing isotopic datasets? More information [here](#).

Transdisciplinary convergence: solving complex socio-ecological problems (FW696) Spring 2022 Instructors: Kyle Horton and Jeffrey Kelly (University of Oklahoma)

Participants in this seminar will explore best practices and examples of transdisciplinary convergence research for solving complex socio-ecological problems. The most compelling and challenging problems we face are at the boundary of society and ecology. Traditional disciplinary and multi-disciplinary approaches have proven inadequate for resolving these problems. Recently the National Academy of Sciences and the National Science Foundation have emphasized a new Transdisciplinary Convergence approach to make progress on these complex issues. This research approach is identified by: (1) addressing a specific, complex, and compelling problem; (2) engaging a research team that has deep integration across disciplines; and (3) having a research design that plans for transdisciplinary integration beginning at project initiation. More information [here](#).

One Healthy City (PBHL692A) Spring 2022

The One Health Institute team is excited to announce the first for-credit course offering sponsored by OHI. "One Healthy City" (PBHL692A) is a 1-credit seminar course open to all graduate students across colleges and programs. The One Healthy City Project will bring together these interdisciplinary graduate and professional students to enhance our local community through the implementation of the 10-minute walk initiative. The course is a combination of seminars delivered by CSU faculty and City of Fort Collins staff, and project-based learning to create real-world recommendations for neighborhoods in Fort Collins. This group's work will be used to develop the concept of Nature in the City of Fort Collins. This is a great opportunity for students who have an interest in One Health, public health, community-engaged scholarship, and community health. Contact [Sue Vandenwoude](#) for more information.

Tools for Food-Energy-Water System Analysis (CIVE 527) for Spring 2022.

9:00 - 10:50 am on Mondays and Wednesdays. The course includes lab time from 9:50 - 10:50. Course Description: This 3-credit hour course aims to equip students with tools to be used across disciplines that advance capacity to assess complex FEWS issues. Statistical analysis and data mining approaches are included to explore prevailing relationships amongst FEWS under varying conditions. Tools and approaches introduced include statistical analyses, life cycle assessment, triple bottom line analysis, and multi-criteria decision analysis. [Syllabus](#) More information [here](#).

New online course - Ecosystem Services on Agricultural Lands

Dr. Dana Hoag in Agricultural and Resource Economics is offering a new online graduate course this Spring: AGRI 638 – Ecosystem Services on Agricultural Lands. Tuition is set at in-state rates, even for non-residents. Check it out or register

at: <https://www.online.colostate.edu/courses/AGRI/AGRI638.dot>

Course description: This course 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 improve their sustainability by earning revenues from resources on agricultural properties. Examples include selling carbon credits, wildlife banking, hunting and agro-tourism. We will dig deep to find unique and innovative ecosystem services, and about how to market them. All students will create an ecosystem marketing plan on an actual farm, ranch or other appropriate extensive properties.

ANTH 570 Paleoclimate and Human Evolution Spring 2022

Instructor: Andrew Du

The class will be a seminar, wherein we discuss how one makes paleoecological inferences with the archaeological/fossil record (so it's a paleoecology class). Topics will include fundamental ecological theory, how we reconstruct paleoenvironments, how we deal with sampling/preservation biases, etc. The topics will be theoretical/methodological and will not be tied to any particular place or time period (though of course we will draw upon certain places and time periods for examples).

Plan Ahead! Fall 2022

ESS 575 - Models for Ecological Data - Dr. Tom Hobbs, Professor Emeritus

Lecture: TR 9:30-10:45 Lab: W 1-2:50_Gaining insight about the operation of ecological processes using models and data.

Plan Ahead! Fall 2022

WR 574 - Advanced Snow Hydrology - Professor Steven R. Fassnacht

Lecture: TR 9:30-10:45 Recitation: T 12:30-2:00 In-depth study of snowpack processes and modeling, time series data analysis, and discussion of the literature.

Send us your photos! Now more than ever, it's important for us to keep in touch. Send us your photos

of your WFH desk, from the field, or just photos of you relaxing and enjoying summer!

[Submit Photos](#)

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, [Andreas Wion](#) and [Sarah Carroll](#) 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!

[General Student Resources](#)
[COVID Resources for Grad Students](#)
[CSU COVID Recovery Resources](#)

GRANTS & JOBS

Physical Scientist (GS 07/09) Vacancy in the USGS WY-MT Water Science Center's Geospatial Analysis Unit

Application Due Date: January 11

The USGS Wyoming-Montana Water Science Center has a rare and exciting vacancy announcement for a Physical Scientist (GS 07/09) in the Geospatial Analysis Unit. This opportunity is open to graduate-level students currently enrolled (or accepted for enrollment) in a degree or certificate program on a full- or half-time basis. This opportunity is open to the public at USAJOBS More information [here](#).

InTERFEWS Application Period for Fall 2022 Trainee

Application Due Date: January 14

Interested in food, energy or water systems and sustainability issues? Consider applying for the new Interdisciplinary Training, Education and Research in Food-Energy-Water Systems ([InTERFEWS](#)) graduate traineeship program created to integrate **Food-Energy-Water (FEW)** education using a systems-based approach that cuts across disciplines, departments and colleges. [InTERFEWS](#) is currently accepting CSU PhD candidates to join the fall 2022 semester, with priority given to those entering the 1st or 2nd semester of their PhD program (those beyond their 3rd semester are not eligible). More information [here](#).

ESA scientists in Parks Fellows National Park Service

Application Due Date: January 23

The Scientists in Parks (SIP) Fellows program is now accepting applications from current upper-level undergraduate and graduate students for summer 2022 opportunities with the National Park Service. Each opportunity with the SIP Program affords a distinct and memorable experience with projects that vary based on location, focus, and complexity. This year's projects include tracking coral reefs at War in the Pacific National Historical Park, community-based education and outreach at Everglades National Park, and surveying pollinator abundance at Yosemite National Park. Visit the website to get the full list of 2022 opportunities! More information [here](#).

Post-Doc Research Associate, Chapel Hill, NC

Proposed Start Date February 1

The Center for Public Engagement with Science (CPES) in the UNC Institute for the Environment seeks a postdoctoral scholar to begin February 1, 2022. The CPES partners with UNC faculty and community leaders in North Carolina (NC) to translate environmental science research results into action in NC communities and beyond. This position will support curriculum development and teacher professional development (TPD) activities associated with a new NIH-supported project: Iterative Design to Engage All (IDEA) Learners. More information [here](#).

Frontera Computational Science Fellowships June 1, 2022 - May 31, 2023

Application Due Date: February 18

TACC is pleased to announce the Frontera Computational Science Fellowship program, a

unique opportunity for graduate students to perform cutting-edge computations on the most powerful supercomputer available to academic researchers in the world. More information [here](#).

Swiss Federal Institute for Forest, Snow and Landscape Research WSL

Application Due Date: March 15

The Swiss Federal Institute for Forest, Snow and Landscape Research WSL is part of the ETH Domain. Approximately 600 people work on the sustainable use and protection of the environment and on the handling of natural hazards. The Research Unit Community Ecology is interested in how above- and belowground ecosystem patterns and processes influence communities and their dynamics. By **October 2022**, the Research Group Plant-Animal Interactions is offering a tenure-track position as Soil food web ecologist 80-100% (f/m/d) More information [here](#).

[Submit Job Announcement](#)



GRADUATE DEGREE
PROGRAM IN ECOLOGY
COLORADO STATE UNIVERSITY

