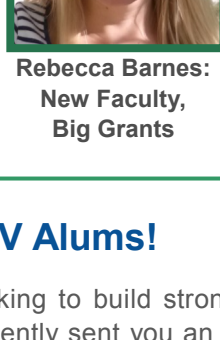




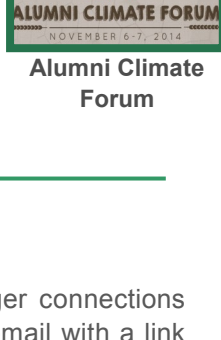
#### Top stories in this newsletter



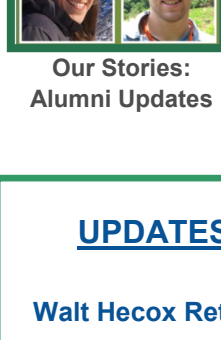
**Alumni Survey**



**Rebecca Barnes: New Faculty, Big Grants**



**Alumni Climate Forum**



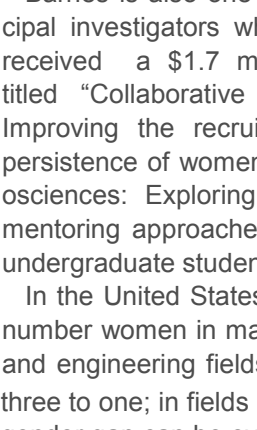
**Our Stories: Alumni Updates**

#### EV Alums!

The EV program is looking to build stronger connections with our alumni. We recently sent you an email with a link to a [short survey](#) that will help us improve the networking opportunities for you and future CC graduates. If you missed that email, please follow this link:

[http://coloradocollege.az1.qualtrics.com/SE/?SID=SV\\_89cYHStyibi2vhl](http://coloradocollege.az1.qualtrics.com/SE/?SID=SV_89cYHStyibi2vhl)

#### Dr. Rebecca Barnes joins EV Faculty



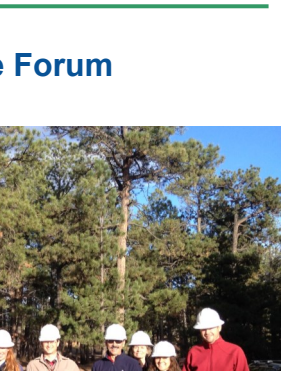
This fall, the EV faculty welcomed new Assistant Professor Rebecca Barnes, a biogeochemist and ecosystem ecologist interested in understanding how aquatic and terrestrial ecosystems process and export nitrogen and carbon. She is particularly interested in understanding how disturbance and global change drivers (e.g. nitrogen deposition, land use change, and warming) affect ecosystem function. Prior to arriving at Colorado College, she worked with numerous researchers from the USGS, Institute of Arctic and Alpine Research at the University of Colorado, Rice University, and the Institute of Marine & Coastal Studies at Rutgers.

Barnes is also one of six principal investigators who recently received a \$1.7 million grant titled "Collaborative Research: Improving the recruitment and persistence of women in the geosciences: Exploring deliberate mentoring approaches aimed at undergraduate students."

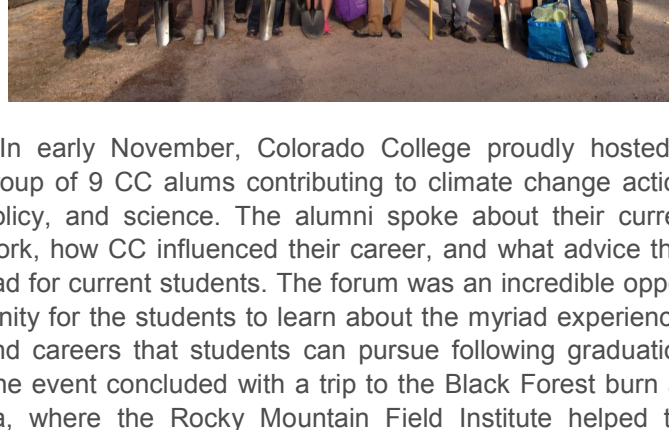
In the United States, men outnumber women in many science and engineering fields by nearly three to one; in fields such as physics or the geosciences, the gender gap can be even wider.

The goal of the grant is to increase the pipeline of female students entering the geosciences. Barnes notes that "Many of us had few female professors or even fellow female classmates as we went through school. We are hoping that this program creates a mentoring network that helps to offset some of these feelings of isolation."

The EV department is pleased to have Dr. Barnes join the EV faculty. Barnes is currently teaching courses such as Ecosystem Ecology, Intro to Global Climate Change, Human Impacts on Biogeochemical Cycles, and Water.



#### Alumni Climate Forum



In early November, Colorado College proudly hosted a group of 9 CC alums contributing to climate change action, policy, and science. The alumni spoke about their current work, how CC influenced their career, and what advice they had for current students. The forum was an incredible opportunity for the students to learn about the myriad experiences and careers that students can pursue following graduation. The event concluded with a trip to the Black Forest burn area, where the Rocky Mountain Field Institute helped the group plant seedlings to revegetate the area. This year, we hosted:

- Natalie Kerwald, '99
- Danica Lombardozi, '04
- Cathy Whitlock, '75
- James Bradbury, '95
- Kyle Hemes, '11
- Chris Treese, '78
- Matt Banks, '97
- Katherine Neebe, '97
- K.C. Boyce, '00

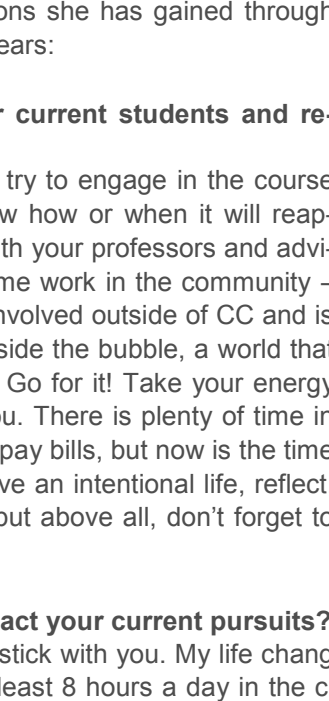
The event was sponsored by The President's Office - C-LET Action Team, The Environmental Science Program, The State of the Rockies Project, The Southwest Studies Program, The Office of Sustainability, The Rocky Mountain Field Institute.

We are hoping to continue alumni events like this year's Climate Forum. If you are interested in participating, please let us know!

#### Our Stories: Updates from EV Alumni

##### Liza Mitchell, '08

Liza Mitchell is one of the many accomplished graduates of the Environmental Program. After graduating in 2008, Liza worked as the EV department paraprofessional. She later moved to Homer, Alaska, where Mitchell worked with Cook Inletkeeper, a watershed conservation non-profit. In Alaska, Mitchell developed a deep love of wild landscapes and a love of stream ecosystems. Mitchell continued to work in Alaska as a wilderness therapy instructor and expedition guide, leading 49-day canoeing and mountaineering trips in the Alaskan and British Columbian backcountry.



Recently, Mitchell attended graduate school at the University of Idaho. Her master's thesis explored spawning salmon and the biogeochemistry of stream networks in a wilderness watershed. Her research involved a creative approach to field work involving travel to research sites by bush plane, horseback, by foot, bike or kayak. In Mitchell's words, "It was adventuresome – what else could a CC grad do?!"

Mitchell kindly shared a reflection of her experiences with the EV department and the lessons she has gained through her experiences of the past few years:

**1. Do you have any advice for current students and recent graduates?**

Keep taking classes and really try to engage in the course material because you never know how or when it will reappear in your life. Stay in touch with your professors and advisors. To current students: Do some work in the community – it is great for your resume to be involved outside of CC and is a good reminder of the world outside the bubble, a world that needs you! To recent graduates: Go for it! Take your energy and do whatever feels right to you. There is plenty of time in the world to get a steady job and pay bills, but now is the time to get out there and try things. Live an intentional life, reflect, adjust your priorities as needed but above all, don't forget to take reasonable risks!

**2. How did the EV program impact your current pursuits?**

The hardest classes ultimately stick with you. My life changing class was Water: I recall I had no social life and spent at least 8 hours a day in the classroom/field/lab/library, but the applicable experience it provided was invaluable. The project we worked on with a local consulting business to collect data and provide a plan for the restoration of Fountain Creek felt meaningful, was a glimpse into what a career in that field would be like, and really taught me how to do research, synthesize information, and defend my work with confidence. Looking back on my major, the same could probably be said about Energy, Air, or Environmental Policy. I transferred to CC my junior year of college, so the fact that the EV program had such a great influence on my life (both my lifestyle and professional direction) is a true testament to the program!

**What do you think may be next on the horizon for you?**

After completing graduate school and presenting my final results at a national conference, I returned to Alaska to work for the summer as a natural history instructor and sea kayak guide at a science and leadership camp for Native Alaskan youth. It was a wonderful way to regain balance after grad school.

I am now enjoying fall in Idaho and looking for that perfect job to combine my interest in aquatic science and watershed integrity with my love of the outdoors and engaging others to develop a sense of place and environmental curiosity. Let me know if you hear of any!

**Why do you do your current work? What inspires you?**

There's something about streams and rivers that got inside me and I can't stop loving them. They are the veins of the earth, conduits of life, threads that connect snow to desert to ocean and rain to valleys to trees. Change is their only constant, and they are brilliant indicators of human impacts on the earth and also of nature's impressive resilience.

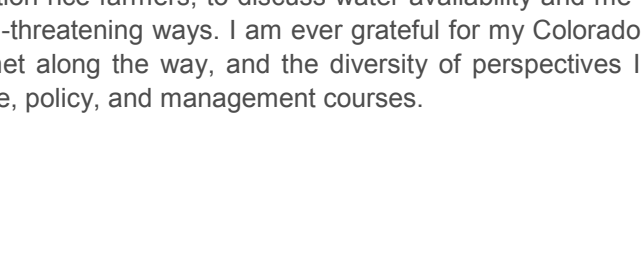


**Besides your work, how do you enjoy spending your time?**

Skiing! Also hiking, writing, traveling, and beekeeping. Yep, I started a beehive here in Moscow, ID that I keep and help high school students manage as an educational project and as a way for honey for the environmental club's fundraising efforts!

**What do you think may be next on the horizon for you?**

Looking to continue pursuing these deeply intertwined environmental and land use questions after graduation, I made my way back to Southeast Asia, on a one-year Princeton in Asia fellowship working for the World Wildlife Fund's (WWF) Greater Mekong Program in Laos. Drawn to the idea of quantifying ecosystem services related to forest carbon sequestration at the project and jurisdictional level, I was challenged with the task of communicating my technical experience to stakeholders in villages, NGOs, provincial, and national governments. While I was involved in everything from financial feasibility studies to remote sensing image classification, the highlight of my work in Laos consisted of leading biomass inventory expeditions to remote parts of the country, often as the sole foreigner. My time in Laos and



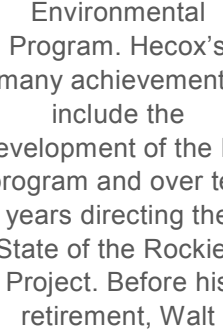
Vietnam exposed me to the relationship between rapid land use change and the degradation of ecosystem services. Importantly, I learned how to discuss these often-controversial scientific and resource issues with all kinds of stakeholders – from communist government ministers to rural subsistence farmers.

After two years at the nexus of science and development in Laos and Vietnam, I am currently engaged in the domestic environmental asset market, working for one of the foremost voluntary and California compliance greenhouse gas registries, the American Carbon Registry (ACR), an enterprise of Winrock International. I am most excited about my duties surrounding the writing, peer review, and approval of new quantification methodologies in the agriculture, forestry, and land use space. I have worked extensively on ACR methodologies that quantify GHG fluxes from activities such as rice water management, improved forest management, compost applications to grazed grasslands, and wetland restoration.

The development of these complex protocols involve myriad technical discussions and a systems understanding of the interactions that govern trace gas movement between land, water, and atmosphere. I often fill the niche of translator – articulating how technical concepts get synthesized into legal documents that spur action and investment on the ground. For example, I had to find strategies, as I bounced through rice fields in eastern Arkansas with fifth generation rice farmers, to discuss water availability and methane fluxes in accessible and non-threatening ways. I am ever grateful for my Colorado College education, the people I met along the way, and the diversity of perspectives I gained in my environmental science, policy, and management courses.

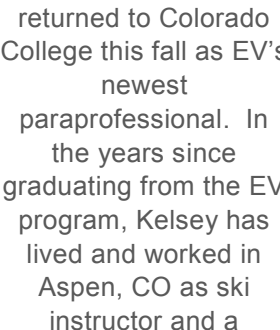
#### UPDATES

##### Walt Hecox Retired



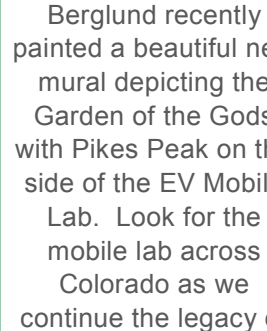
After 44 years at Colorado College, professor Walt Hecox has retired from the Environmental Program. Hecox's many achievements include the development of the EV program and over ten years directing the State of the Rockies Project. Before his retirement, Walt received the Stuart P. Dodge Award for lifetime achievement in conservation by the Palmer Land Trust.

##### EV Paraprofessional: Kelsey Elwood



Kelsey Elwood '12, returned to Colorado College this fall as EV's newest paraprofessional. In the years since graduating from the EV program, Kelsey has lived and worked in Aspen, CO as ski instructor and a naturalist for the Aspen Center for Environmental Studies (ACES). Kelsey is excited to bring her knowledge and enthusiasm for the natural world to current EV students.

##### Mobile Lab Painted



Senior EV major Erika Berglund recently painted a beautiful new mural depicting the Garden of the Gods with Pikes Peak on the side of the EV Mobile Lab. Look for the mobile lab across Colorado as we continue the legacy of unique, engaging field experiences for our students.

##### Job Announcement: Two New Faculty Positions

The EV Program is GROWING! With over 100 declared majors, we have received funding for two faculty positions starting in Fall 2015. We are currently in the process of hiring a social scientist and also currently have an open-call for an atmospheric scientist. The atmospheric science assistant professor position is open for application until December 19. For more information about this opportunity, please follow this link: [https://www.coloradocollege.edu/offices/dean/faculty-employment-opportunities/current\\_openings\\_dot](https://www.coloradocollege.edu/offices/dean/faculty-employment-opportunities/current_openings_dot)

##### The EV Program received \$10,545 in donations this year

The EV Program would like to thank the following for their support:

- Chris Dickson '13
- Andrew Fahlund '91
- Samantha Lampert '03
- Kristy Larsen, Parent of '14
- Sean McGarry '02
- Marcia McNutt '74
- Lionel and Rosamond Naylor, Parents of '13
- Sarah Waldo '09
- Ethan '07 & Lauren '07 Watel

##### Kyle Hemes, '11

My interest in ecosystem ecology and terrestrial land use was first ignited by a semester abroad in Thailand. Based at the International Sustainable Development Studies Institute in Chiang Mai, Thailand, I was exposed to the way that humans are inextricably linked to forest and agricultural ecosystems and the services they provide. Backpacking through the Karen villages of northern Thailand along the Burmese border, I studied the ecology of the swidden agricultural system, taking measurements in forest plots at different regenerative stages. I was struck by the way that land and livelihood were so linked, as I gasped for breath following flip-flop adorned Karen farmers up the impossibly steep upland agroforests. These early experiences, I now see, seeded the questions that became the themes of my later work.

In the summer of 2010, I had the opportunity to do a research internship with the Center for Multiscale Modeling of Atmospheric Processes (CMMAP), a National Science Foundation funded science and technology center run by Colorado State University. I found myself involved in a study of the effect of different phenological vegetation models on biome-specific, regional carbon fluxes. Analyzing phenology data from Southeast Asia biomes, I was thinking about those same Thai tropical forests I had recently plodded through at a grander, ecosystem level. My interest in the connectedness between field observation and regional modeling has stuck with me ever since.

Looking to continue pursuing these deeply intertwined environmental and land use questions after graduation, I made my way back to Southeast Asia, on a one-year Princeton in Asia fellowship working for the World Wildlife Fund's (WWF) Greater Mekong Program in Laos. Drawn to the idea of quantifying ecosystem services related to forest carbon sequestration at the project and jurisdictional level, I was challenged with the task of communicating my technical experience to stakeholders in villages, NGOs, provincial, and national governments. While I was involved in everything from financial feasibility studies to remote sensing image classification, the highlight of my work in Laos consisted of leading biomass inventory expeditions to remote parts of the country, often as the sole foreigner. My time in Laos and Vietnam exposed me to the relationship between rapid land use change and the degradation of ecosystem services. Importantly, I learned how to discuss these often-controversial scientific and resource issues with all kinds of stakeholders – from communist government ministers to rural subsistence farmers.

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