



PETROGLYPHS

Environmental Earth Science

2024-2025 Newsletter (14th Edition)

Message from the Chair

Bryan Oakley

"Climb the mountain so you can see the world, not so the world can see you."

David McCullough Jr.

As we arrive at the halfway point of 2025 it is time for us to reflect on the many accomplishments of Environmental Earth Science Students and faculty over the past year, and the quote above seems fitting as we approach the finish line of one academic year and are set to climb onto another! Pulling together the newsletter content, I am always struck by just how much everyone does around here to make EES the successful academic juggernaut that it is!



2024-2025 marked changes for EES; some good, some bittersweet. The bittersweet: the retirement of department secretary Zosia Carlquist after 25-years of service to Eastern and Lynn DeLima, who has been a part-time faculty member for EES since ~2008. Both will be missed greatly and we wish them well on their next chapters!

The good: EES launched the revised curriculum, retaining our traditional Environmental Earth Science track along with a new track focused on Environmental Science and Sustainability. These revisions ensure our graduates remain relevant facing the challenges of the 21st century. Beginning in the fall '25, we welcome Dr. Patty Szczys to the faculty; Dr. Szczys has been a familiar face around the department the last few years as she directed the Institute for Sustainability on campus and will help us further refine our curriculum to include more environmental and sustainability-focused content.

We wrapped up the school year with our annual End-of-Year Celebration. During the celebration, research recognition awards, a \$1000 Solar Energy Association of Connecticut scholarship and our Academic Awards were given out. The top award for Outstanding Environmental Earth Scientist award was shared between Daria DiBiasio and Hailey Cocca. EES alum Jennifer Croteau gave the students some great advice reflecting on her time in EES and her current career working in offshore wind energy.

I would be remiss not to acknowledge the invaluable contributions of the EES faculty over the past year, along with the guidance and support consistently offered by Assistant Department Chair Steve Nathan. The professionalism, dedication, and camaraderie among our full-time and part-time faculty are truly outstanding. Even more meaningful is the way the EES faculty have cultivated a department culture where students are challenged academically while still feeling supported, welcomed, and respected. This has been accomplished while upholding a strong standard of scholarly achievement, as clearly demonstrated in the faculty updates. Thanks to all of you—faculty and students alike—you make coming to campus each day something I genuinely look forward to, and you make my role as Department Chair all the more rewarding. I can proudly say that we are one of the largest undergraduate Earth Science programs in New England, yet we remain small enough to know our students personally and feel that the EES community remains as vibrant as ever!

EES Annual Celebration



EES Students, Alumni and Faculty at the 2025 End of Year Celebration (photo credit, Anders Buckhorn, University Relations)
Below: Hailey Cocca (left) and Daria DiBiasio (right) with the photo of the 2025 Outstanding EES Students that now hangs in the EES foyer.



EES Annual Celebration



EES Student Recognition Awards: 2024-2025

Outstanding Environmental Earth Scientist: In recognition of their enthusiasm, academic achievement and contributions to the Environmental Earth Science major, the award was given to *Hailey Cocca and Daria DiBiasio*.

Senior Academic Excellence: In Recognition of Academic Excellence in the senior class, the award was presented to *Rachel Hora*

Junior Academic Excellence: In Recognition of Academic Excellence in the Junior Class, the award was given to *Hunter Piscatelli*

Sophomore Academic Excellence: In Recognition of Academic Excellence in the Sophomore Class the award went to *Andrew Kaika*

Solar Energy Association of CT Scholarship Award: The 2025 scholarship was awarded to *Gabriella Spata*

Sustainability Impact Achievement Award: For contributions to sustainability on campus, the award was presented to *Annalise Kennedy*

Hard Rock Geology Recognition: For students who have demonstrated the highest level of academic achievement in structural geology, mineralogy, and igneous and metamorphic petrology. The 2024-2025 award went to *Emma Bean*

Quaternary Geology Recognition: Award is given to students who have excelled in both applied research topics and coursework pertaining to the Quaternary geology of New England. The 2024-2025 award was given to *Olivia Gentile and Daria DiBiasio*

Geomorphology Recognition: In recognition of the collective efforts in learning and applying digital photogrammetry to ground and airborne imagery of natural and built environments in Connecticut and Rhode Island, the 2024-2025 award was presented to *Matthew Tardella and Kelvin Carranza-Martinez*

Soft Rock Geology Recognition: Award is given to students who have excelled in both applied research topics and coursework pertaining to sedimentary geology. The 2024-2025 award made to *Hailey Cocca*



Congratulations!

Faculty Updates

Dickson Cunningham

Another full year has passed since last year's newsletter. Zosia Carlquist, our wonderful secretary has just retired and EES faculty are now staring into the abyss of administrative who-does-what-now? confusion, but we have decided to continue our annual department newsletter tradition, but with briefer personal content.

On the teaching front, during the past year I taught the intro EES 104 course, EES 330 Mineralogy/Petrology, EES 356 Structural Geology, EES 333 Professional Development and the EES 271 Arizona extended field course (see separate trip report in this issue). I am also creating a new broad-spectrum liberal arts course called 'The Mountain World' which I am excited to teach during fall, 2025. In terms of administrative duties, I served as Department Senator, Faculty Advisor to the EES chapter of the SGE National Honor Society for the Earth Sciences, and on several campus committees including as main organizer for a faculty research symposium and faculty moderator for an employability panel that was part of the Presidential Inauguration Celebration during the spring.

On the research front, I have two papers currently in press: one study concerns criteria for recognizing tectonically active mountain fronts - to be included in a Springer volume on Geohazards, and another paper on active fault systems and earthquake hazards north of Tibet to be published in *Tectonophysics*.

In July, I accepted an invitation to serve as one of the Editors-in-Chief for *Earth Science Reviews* which is one of the top 3 ranked international journals in Geoscience. This is a significant role that is time consuming, but highly enjoyable. I have received a 3-flc release because of the time commitment, and the international attention and prestige this appointment brings to EES and Eastern.

On the home front, our son graduated from high school this spring and will attend Providence College in the fall. He and I enjoyed a wonderful trip to Barcelona and the Pyrenees last summer and we also had a family vacation in England and Pembrokeshire, Wales. I also squeezed in a hiking trip in Shenandoah NP in the late spring and at the time of writing, I am soon to depart for an 8-day hut-to-hut trek in the Italian Dolomites.



With Sam in Andorra



Old Hillbilly, Shenandoah NP



Glorious Pembrokeshire, Wales

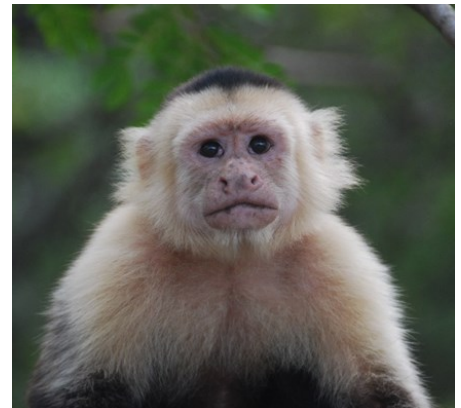
Peter Drzewiecki

Greetings! I hope you are all enjoying a happy and prosperous 2025! Summer 2024 began with travel to Nova Scotia. It was early in the season and still a bit cold and rainy, but we managed a few good hikes, a short sailing adventure, whale watching, and visits to Peggy's Cove, Lunenburg, Halifax, Louisbourg, and Sydney. We spent two days on the famous Cabot Trail taking in the scenery. We also enjoyed our usual trips to Buffalo, New York City and Maine to visit family.

I spent my Fall 2024 semester on sabbatical, wrapping up a few projects and starting some new ones. I was able to submit two papers to a Yale Peabody Museum Bulletin issue about Dinosaur State Park which came out in spring 2025. I also started a project with Chuck Ver Straeten of the New York State Museum looking at Devonian continental strata in the Catskills. These strata were deposited at a critical time in Earth history, when forests and vertebrates first spread over the land. One of the sites we visited contains the world's oldest known forest. My wife and I also managed a long weekend at Lake George for their annual balloon festival. In January, we celebrated my wife's 60th birthday with a trip to Costa Rica. My entire family (4 children and two significant others) made the trip. We explored the rain forests, made friends with White-faced Capuchins, zip-lined through a cloud forest, toured a coffee/chocolate plantation, went diving (saw some reef sharks!), relaxed on the beach, and enjoyed some fantastic food. In spring 2025, it was back to teaching! I taught Ancient Environments and an introductory course on dinosaurs, and co-led a global field course to Arizona with Dr. Cunningham. More significantly, I completed my work on Eastern's new ELAC curriculum. This replaced the LAC curriculum, and is designed to give students an experience more closely aligned with private Liberal Arts schools. I was co-chair of three committees since 2019 that oversaw its design and implementation. It was with great relief that the program is underway, and my role is done! I was able to work with a few students this past year. Hailey Cocca finished her Honors Thesis under my direction with great success (winning the Outstanding Thesis Award). Her project included documenting the role of salt tectonics in the growth of an anticline in the south-central Pyrenees in Spain. This wraps up my work in Spain, except for publications! Emma Bean helped with the project, primarily with field work. This summer, students Hunter Piscatelli and James Bragg-Phillips are working on the Devonian project with me.

If you are ever in the area, please stop in to see us! Cheers!

Top Row – Lisa and I at Peggy's Cove lighthouse (Nova Scotia), Nova Scotia coast, me at the Lake George Balloon Festival. Bottom Row – Costa Rica! The family exploring the Monteverde Cloud Forest, sunset at Playa Matapalo, furry friend.



Drew Hyatt

Well as another year passes! I am pleased to describe some of the various activities that I have been involved with for the Fall 2024 to Summer 2025 cycle. As touched on briefly below this year was significant for personal and professional reasons. I became a grandfather, a very good long-term EES colleague and friend (Zosia Carlquist) retired after receiving a university award for her service, and I continue to have great departmental professorial colleagues to work with! Equally important, I enjoyed my classes (including directed research 2 EES students) and I had a good year for publications. The following provides a few details related to these items.

The academic year ramped up quickly, with 4 classes in the fall including 2 sections of Dynamic Earth (EES 104), Geology Lab (EES 112 lab), and Field Methods (EES 350). Intro classes (104 & 112) provided opportunities to meet several new majors and other first year students, while field methods, which enjoyed very nice weather, gave me an opportunity to work outside with many soon-to-graduate EES majors (a few pics below). EES 350 students learned and applied a variety of field techniques culminating with a team-based project at Shelter Falls Nature Preserve in Mansfield. The field project integrated surface topographic measurement, bedrock characterization, as applied to a bedrock-controlled landscape. In the spring (2025) I taught Landform Analysis with lab (EES 224), which I always enjoy as I get to meet the next wave of majors! I also taught an Imaging and Image Analysis which introduced EES seniors to a variety of Imaging, 3D modelling techniques through related activities. Students assessment was based on written activity reports utilizing data and images they collected, and modified, manipulated and analyzed with a variety of software tools. As well, students were introduced to drones, learning to fly, and capture drone imagery and build related models (all with appropriate permitting). This was an excellent, committed group of EES students that were very fun to work with, some of whom I will likely get to know more through the upcoming field methods class. Pic's below provide some views as students capturing images to model a variety of samples and sites including the on-campus Arboretum. I also had to include my 64th birthday hand-stand in class; last time I'll try that!

Right: EES senior students from the Fall 2024 Field methods (EES 350) class at the final project site where they worked in teams to collect original field data (observational and utilizing a variety of survey measurement techniques) to assess geologic controls on the nature of the landscape at Shelter Falls in Mansfield, CT.



Drew Hyatt



EES students in the imaging and image analysis (EES 441 class) learned to capture good images to build measurable 3-dimensional models of geologic samples and sites (including Eastern's Arboretum). These activities involved numerous Activity reports that were modelled on professional consultant report writing with supporting scientific context from related literature. The final assignment required students to assemble a scientific poster based on revisions to their activity reports that had received feedback from the instructor (i.e. me).

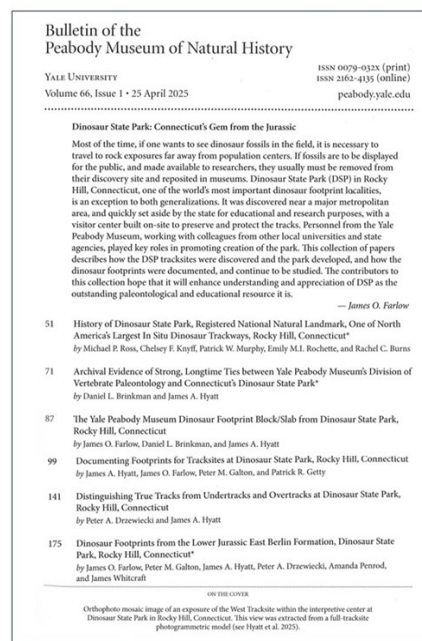
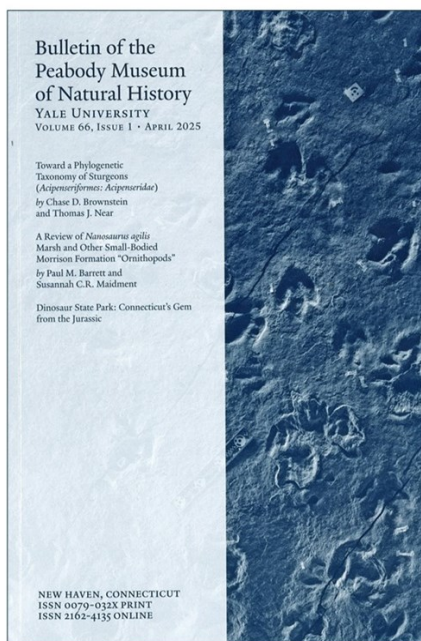
Drew Hyatt

It was also a busy year for research, largely due to efforts spanning several years on dinosaur track modelling activities. This resulted in my coauthoring 5 papers (one of which I was lead author on) in a special issue of the Yale Peabody Museum Bulletin (Vol. 66, Issue 1, April 2025) that examined a variety of aspects of tracks at Dinosaur State Park.

The cover of the volume, with a photo I shot at DSP, and a condensed table of contents are shown below. Much of this work was due to the efforts of my long-term collaborator Dr. Jim Farlow (Emeritus, Purdue University), but as well several papers were with other coauthors. Notably this includes department colleague Peter Drzewiecki who was lead author on 1 paper and coauthor on 2 more. I also conducted some new modelling work at the Yale Peabody that hopefully will be my contribution (as a trailing author) to a paper that should (hopefully!) be submitted to the Yale Peabody Bulletin for review sometime over the coming year.

Undoubtedly the most significant thing in my life this past year was the joy of becoming a first-time grandfather this past July to Maeve Ceasar, daughter of our daughter Hannah! Trudy and I are absolutely thrilled about this and were able to be with Hannah and her husband Gordon shortly after delivery. As such, I save the best pics for last! Had to also include our new 4-legged family member Imka as well!

Views of Maeve less than a day old with Trudy and myself, at ≈5 (days) old, and a view of our other new family member, Imka, flying down a hill near Lake Placid ... ok, I added the cape!



Steve Nathan

This past year I had a great time teaching four different classes (Sustainable Energy, Energy Resources, Energy Issues in Geoscience and Oceanography). Keeping my Sustainable Energy (EES 205) and Energy Resources (EES 305) courses up to date is a challenging but equally enjoyable task. Both topics are evolving rapidly, in part because of the continuous tug of war between advancements in renewable energy technology and the continued use of fossil fuels. For Energy Issues in Geoscience (EES 402), a Writing Intensive course, ChatGPT is the elephant in the room. Although AI is a tool employers will expect our students to know, I strive to help our students develop a solid foundation in writing so they can stay one step ahead of the technology. Teaching Oceanography (EES 200) is a hoot. The many in-class exercises and “beachcombing” that we do (i.e., hands-on study of seashells, mermaids’ purses, and other Connecticut’s shoreline stuff) always keeps the students engaged.

For fall 2025 I will add Climate Change (EES 204) to my teaching repertoire. I last taught Climate in 2012 and a lot has changed (pun intended). It is now a scientific certainty and full-scale political football. I look forward to helping students get a sound understanding of the subject and how they can address it.

A big spring project for me is organizing the Earth Day Farmers Market at Eastern. This past April over 25 student clubs/groups and professional farmers/civic groups celebrated the occasion (e.g., Wilkinson Farm, Mountain Dairy, Willimantic Food Co-op, Last Green Valley). With warm sunny skies, Eastern’s 3 O’Clock Jazz Band putting a cool vibe in the air, and hundreds of students, staff and faculty participating, Earth Day 2025 at Eastern was a huge success.

Outside the day job, in July my wife Mary and I took a minivacation to NYC to mark our wedding anniversary. We explored some of the standard tourist traps (e.g., Empire State Building, Battery Park), museums (e.g., the Met and American Museum of Natural History; see photos), and lots of eateries (e.g., Zabar’s Deli and the 24-hour, Tick-Tock Diner). It was a fun trip and we’re already making plans for next year.

Photo caption #1: Earth Day 2025 at Eastern. EES Honors Student Hailey Cocca, the Willimantic Co-op dancing frog, and the old guy.

Photo caption #2: Me, Ted and Mary at the American Museum of Natural History, NYC; July 2025.



Meredith Metcalf

Hello and greetings!

I can hardly believe that this fall will mark my 15th year at Eastern—time has certainly flown by! On a personal note, life has been full and joyful. My daughter, Rome, will be starting first grade this year. My husband and I coordinate our teaching schedules so we can each enjoy as much time with her as possible during these fun-filled years. Rome has developed a love for school, gymnastics, and ballroom dancing. Last year, she even joined us on my husband's annual study abroad program to Italy and Greece—an adventure that has turned her into quite the young traveler!

Professionally, my research continues to focus on arsenic contamination in groundwater here in Connecticut. Recent legislative changes, however, have made this work more challenging, as water quality results are no longer publicly accessible. Despite these hurdles, my colleagues and I are committed to advancing our efforts by collaborating with local and state agencies, as well as engaging the public to emphasize the importance of sharing and accessing environmental data. This spring, we collected water samples from areas with elevated arsenic concentrations to determine the age of the water, adding a new dimension to our ongoing investigations. We've also had the opportunity to present our findings to fellow environmental professionals, fostering valuable discussions and partnerships.

In the classroom, I've developed a rotating schedule of courses that includes introductory and applied GIS, CAD, and hydrogeology. This rotation supports the launch of Eastern's forthcoming online GIS Certificate program, which is currently making its way through administrative approval. One highlight from this past spring was Eastern's hosting of the Spring NEARC conference, which brought together GIS professionals from across New England to share projects, innovations, and ideas. It was also a wonderful chance to reconnect with EES alumni—including Erica Poisson (formerly Tefft), Eric Lindquist, Alex Fazzino, Jenny Petrario, and Samantha Noble (formerly Boyle)—and celebrate the great work they're doing in the field.

I'm excited for the year ahead and look forward to seeing what new opportunities and collaborations will emerge—both in the classroom and in the field.

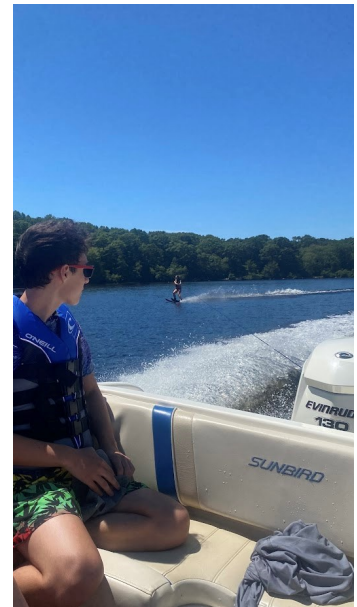
Right: Meredith and Gary Robbins in the field collecting water samples for age dating



Bryan Oakley

Another year has come and gone. 2024-2025 was especially hectic as the program went through our 7-year academic program review and we launched (officially) the revised curriculum in the fall.

On the teaching front, during the past year I taught the intro EES 104 course, Glacial (EES 424), Coastal (EES 456) and EES 220 (Environmental Geology). I also taught an honors colloquia on Sea Level Rise in New England that I very much enjoyed. I am looking forward to two new courses this fall; I am co-teaching Climate and Weather (EES 362) with Dr. Hyatt and I am teaching a new LAC100 seminar on Environmental Issues in Earth Sciences. On the research front, I have two papers under review at the time of writing, one with some talented colleagues in ocean engineering at the Graduate School of Oceanography, the other with alumni co-authors Emily Watling and Nina Musco among others. Along with my on-going projects at Block Island and Napatree Point, I began a collaboration with the Fishers Island Conservancy to do some additional coastal monitoring there. I continue to pursue research projects with students so reach out if you are interested! On the home front, Aidan is entering his sophomore year of high school and starting drivers ed (I expect the rest of my hair to go gray and fall out as part of that process) and Haley heads to the 7th grade.



Left to Right: Aidan with a small Bluefin on his grandfathers boat; ready for ziplining in NH; Aidan supervising his mom as she skis behind his (other) grandfathers boat. Below (L-R) Atop Bald Mtn (NH), winter hikes with Rocky; Haley after her dance recital; having some fun with mellow spring waves.



Patty Szczys

I am excited to join the department and for the opportunity to lead the Center for Sustainability Studies. As the Executive Director of the Institute for Sustainability for the last three years I have worked with faculty to integrate sustainability across the curriculum under the framework of the UN Sustainable Development Goals.

Leading the green campus committee, I have advanced sustainability initiatives such as opening the free campus thrift shop, Thrift Warriors, and food scrap composting at the community garden. These and other campus initiatives will continue as we work to align sustainable practices with what it means to be a "Warrior". We will apply to renew our AASHE STARS Gold recognition at the end of the year.

My research focus on seabirds continues with the first of several papers expected from a new project out already this year. I also serve as an Associate Editor for the international journal, "Waterbirds".

Finally, I am most excited to return to the classroom this fall, offering a new course "Sustainability in Action" in the new liberal arts curriculum.

Top: In the field in Costa Rica

Bottom: Presenting research at a conference



EES Theta Upsilon Chapter of the Sigma Gamma Epsilon National Honor Society for the Earth Sciences Annual Highlights



Our chapter of SGE was involved in some notable events this past year.

In October, the Society organized a visit to the Bristol Gem and Mineral show followed by a pizza lunch and wonderful autumn hike to the traprock summit ridge of Ragged Mtn (photo below).

In December, the Society held a holiday bake sale and raised \$530 for the Nature Conservancy of Connecticut.

EES also sponsored a spring presentation by Connecticut State Geologist Megan Seremet who discussed her professional journey and gave practical advice for career pathways and graduate study in the earth and environmental sciences. Megan also met separately with students and EES faculty and her visit was greatly appreciated by all.

SGE also ran a very enjoyable game show night with intensely competitive teams battling though EES-themed games of Jeopardy (Geo-parady) and Connections before being rewarded with rotisserie chicken and various sweet dessert choices!

In May, seven new members were inducted into the honor society at the EES end-of-Year Celebration, while 8 members graduated this year.



EES Theta Upsilon Chapter of the Sigma Gamma Epsilon National Honor Society for the Earth Sciences Annual Highlights



EES Geo-Explorers Return to Arizona!

Spring 2025 Field Course Report

By Dickson Cunningham

During spring break 2025, Dr Drzewiecki and I led 14 intrepid EES majors around the Grand Canyon state. This 12-day trip was the 3rd EES extended field course to Arizona since 2014 and once again it was a wonderful excursion filled with great educational value, exciting hiking adventures and loads of fun-filled moments. Dr D and I both felt that this was one of the most enjoyable trips we have led because our students were so kind to each other, enthusiastic for adventure, and intellectually engaged in what became a very interdisciplinary learning experience.

After a late night flight into Phoenix, we started the trip the next morning with a quick drive up to Val Verde where we visited Montezuma Castle and Well NM and learned a great deal about Sinagua culture and how indigenous people have lived sustainably throughout the Val Verde region for 1500 years. We also explored the sedimentological history of Val Verde and ended the day with a visit to the Camp Verde glauconite/gypsum salt deposits where we all became foot-caked in mud and attracted the curious – but friendly, local police force.

The next day we drove up to Jerome and visited the excellent mining museum and then went down into a tailings gully and collected colorful copper minerals and once again, attracted the curious-but friendly, local police force!

We decided we were finished encountering local law enforcement and then drove to Sedona where we took in the panoramic vistas from the airport and then had a lovely hike up Fay Canyon. At the top of the canyon, our students posed for the most absurd photos and videos I ever seen on my field courses – a further introduction into the Tik-Tok, You Tube, Instagram and Snapchat world they inhabit!

Then it was off to Flagstaff where we explored the volcanic landscapes and eruptive products of the San Francisco Volcanic Field and enjoyed a full day at the Grand Canyon. Notable events included visiting the Wupatki pueblo, a tiring slog up the scoria scree of S-P Crater (those who persevered were rewarded with glorious panoramic views!) and a very snowy arrival at the Grand Canyon where we froze our toes in a blizzard whiteout for the first 2 hours, but were then rewarded with breathtaking canyon views as the clouds lifted revealing fresh snow on the highest stratigraphic layers.

Then we drove east to stunning Meteor Crater where we discussed the evidence for its impact origin (vs other hypotheses) and then onward to the Painted Desert region and Petrified Forest National Park. We hiked the famous Giant Logs Trail and the beautiful Blue Mesa loop and made many other stops to look at the scenery, Colorado Plateau stratigraphy and petroglyphs. That night we all enjoyed a nice Mexican meal before our long drive the following day through the Salt River Canyon and on to Tucson.

En route to Phoenix, we stopped at a great rock/mineral/petrified wood shop and then made several geology stops as we descended the Mogollon Rim examining fossiliferous Paleozoic carbonates, stromatolitic Precambrian limestones, spheroidally weathered basalt, and scenic viewpoints where we discussed the origin of the canyon and Transition Zone geology.

EES Geo-Explorers Return to Arizona!

Spring 2025 Field Course Report

We then had four days in Tucson where we visited: 1) Saguaro National Park (east and west), 2) the Sonora Desert Museum, 3) Tucson Mts caldera and mineral deposit geology sites, 4) Asarco Mineral Discovery Center with a tour of the huge Mission Mine and Ore Processing Plant, 5) San Xavier Mission, 6) Sabino Canyon, and 7) the Mt Lemmon Highway in the Santa Catalina Mts. All of these locations were wonderful visits where we learned a great deal about the geological history of the Basin and Range Province, its natural resources, desert ecology and the region's cultural history. We enjoyed many memorable moments including a beautiful sunset hike in the Tucson Mountains, spectacular views a mile above Tucson at Windy Point, an interesting geo-hike down Sabino Canyon with refreshing canyon pools and a friendly wandering coati, and the impressive metamorphic core complex geology and desert vistas in the Rincon Mountains. We also squeezed in regular – and essential – thirst quenching trips to Dairy Queen!)

This was another marvelous EES trip and Dr D and I are so grateful to our students who each contributed positively to our collective learning journey. The following photos show some of our trip highlights.



EES 2025 Student Group on Blue Mesa Loop Trail, Petrified Forest National Park. From left to right: Lillia Chaves, Kaylee Slosek, Isabella Bagnall, Hunter Piscatelli, Harrison Moss, Annalise Kennedy, William Braithwaite, James Bragg-Phillips, Andrew Kaika, Ezra van Yperen, Santiago Herrera San Martin, Abigale Wilcox, Charles Coccoli, Matthew Tardella.



Montezuma Castle National Monument



Bella, Abbie, Annie, Kaylee and Lillia in Sedona



Ezra on top of S-P Crater



Santiago and Andrew joyously happy in Fay Canyon, Sedona



Crazy from exhaustion on top of S-P Crater



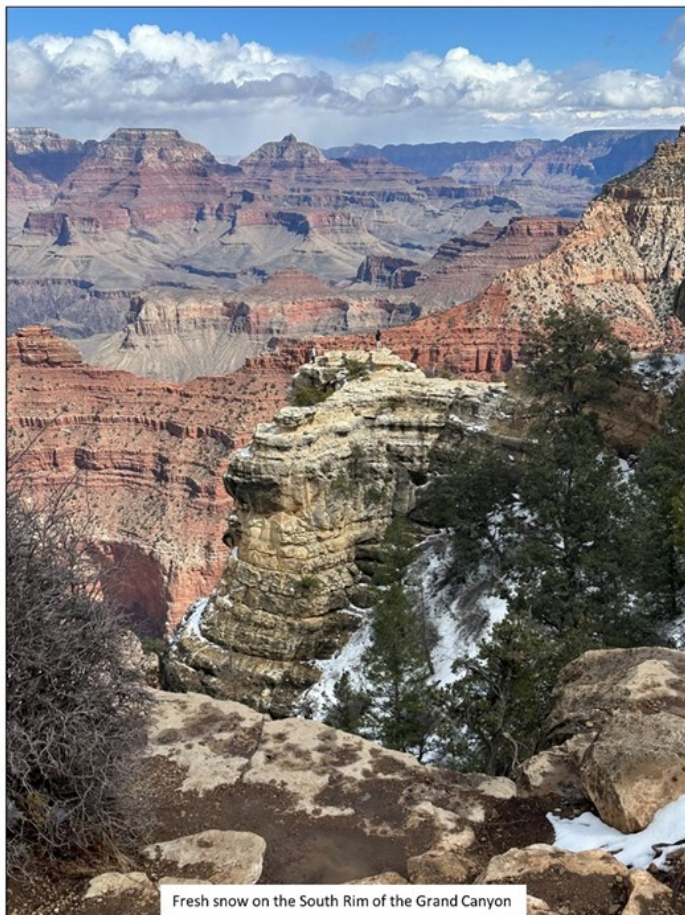
Wupatki Pueblo National Monument



Two Old Goats, S-P Crater



Abbie, Charles, Kaylee and Matt at the Grand Canyon



Fresh snow on the South Rim of the Grand Canyon



Kaylee, Lillia, Bella, Abbie and Annie at the Grand Canyon



The snow stopped and the clouds are lifting!



Group Photo on huge logs at Petrified Forest NP



Visiting Earth's best preserved Meteor Crater



Hunter giving a presentation on the stratigraphy of the Painted Desert



Group photo at the Mission Mine Complex



Tucson Mts scenery



High above Tucson at Windy Point



James in the Santa Catalina Mts



Harrison at sunset in the Tucson Mts



EES Group at San Pedro Vista, Santa Catalina Mts

Holiday Celebration (aka Who doesn't love some office cornhole!!!)



Center for Sustainability Updates

Dr. Patty Szczys, Professor and Director

The Center for Sustainability Studies has offered internal faculty development workshops aimed at integrating sustainability across the curriculum (SAC) over the last three years and was recently designated a Center for SAC by the Association for the Advancement of Sustainability in Higher Education (AASHE). With generous funding provided by AASHE, in 2025, Eastern established the annual Swift Waters Workshop to offer curriculum development opportunities to faculty from outside the institution. This inaugural workshop was held on Eastern's campus on May 28, 2025, and attracted eighteen faculty, 15 from Eastern and three from CT State Community College campuses. Faculty participated in a day-long workshop hearing from four Eastern faculty members how they have integrated sustainability knowledge and skills in their courses that together span diverse disciplines. As a result, four new courses were developed, and six courses were revised, expanding opportunities for students to tackle sustainability problems through new assignments, modules, and case studies.



2025 Warriors Don't Waste Move Out

This year the Student Affairs staff joined the Green Campus Committee to collect at least 2000lbs of unwanted housewares, clothes, and appliances from the residence halls for the campus thrift shop, Thrift Warriors. The Center for Community Engagement ensures that community partners such as WAIM and the No Freeze Shelter, also receive donations. This summer the STEP-CAP Program students volunteered to sort and style the Thrift Warriors shop in preparation for the fall semester. As in previous years, all non-perishable food was donated to the Covenant Soup Kitchen.



2025 Food Scrap Composting and Campus

This year student Annalise Kennedy managed the food scrap composting from campus offices and resident students. Her leadership was recognized at the year-end celebration. Averaging 40 pounds a week, a total of almost 600 pounds were diverted March 2024-April 2025! These food scraps came from 14 offices across campus and a handful of students. The food scraps, along with soil and plant material from the greenhouse, is being composted to feed the campus community garden. This summer student Elayna Zaikarite has been collaborating with Dr. Connolly and the greenhouse interns to care for the community garden. Harvest is under way and we look forward to the return of the Garden Club students this fall.



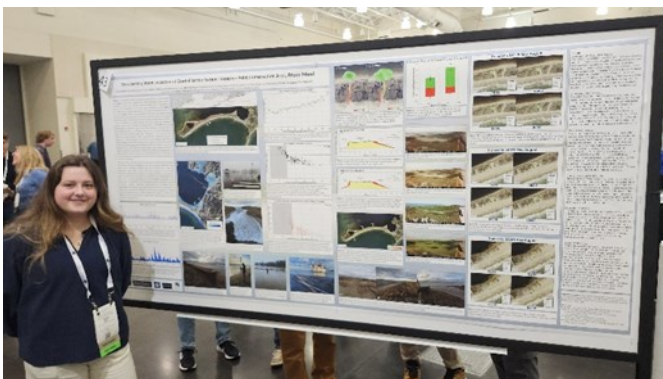
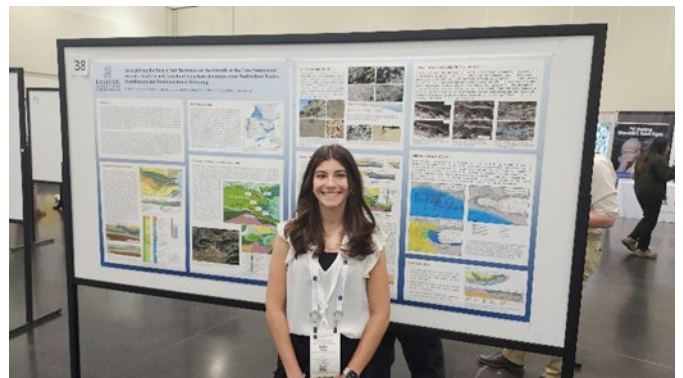
Student Research Conference Presentations

Northeast-North Central Joint Meeting of the Geological Society of America—Erie, PA

In March 2025, a few EES souls braved the 9-hour drive to Erie, Pennsylvania to attend the 2025 Joint Northeastern and North-Central Geological Society of America meeting. Daria Dibiasio, Hailey Cocca, and Emma Bean (all graduating seniors) presented undergraduate research they completed while at Eastern. All three did a great job and represented the university and the EES department well. Daria presented her Honors Research, mentored by Bryan Oakley, documenting a record of paleostorms on the Rhode Island coast. Emma presented work, also mentored by Bryan Oakley, documenting the impact of storms on the beaches at Napatree Point, RI. Hailey presented her Honors Research, mentored by Peter Drzewiecki, on the role of salt tectonics on the growth of the Sant Corneli anticline in the Pyrenees. Peter Drzewiecki presented a talk on the Dinosaur State Park trackway interpretation.

The 2026 Northeastern GSA meeting will be in Hartford (March 21-24)! Everyone is invited to attend! Meeting link: <https://www.geosociety.org/GSA/GSA/Sections/ne/2026mtg/home.aspx>

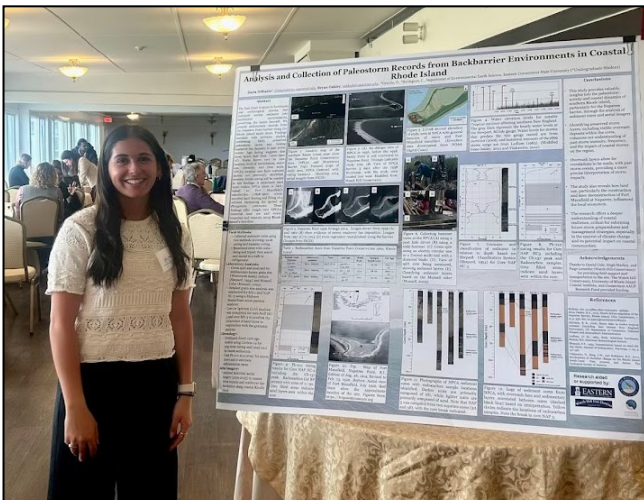
Daria (top left), Hailey (top right), & Emma (bottom left) at their posters. Everyone was happy to be done (bottom right)!



Student Research Conference Presentations

New England Estuarine Research Society Annual Meeting, Provincetown, MA

April 2025, Dr Oakley along with students Daria DiBiasio and Emma Bean presented their research at the annual meeting of the New England Estuarine Research Society (NEERS), which was held in Provincetown MA. Other students took the opportunity to attend a conference and support their EES colleagues. This included Kayla Redanz-Sweat, Olivia Gentile, Gabby Spata and Rebecca Drazul. In the spare time, they explored the beautiful landscape of Provincetown, making stops at Herring Cove, Race Point, and the Provincetown dunes. This conference gave the students a great opportunity to meet professionals and other students who may be studying or working in fields they would like to pursue a career in.



Daria (left) and **Emma** (right) presenting their research at the conference.



The crew at Race Point checking out the local coastal geomorphology

Student Research Conference Presentations

EES Student wins the Warren Award for best undergraduate poster presentation at the New England Estuarine Research Society Annual Meeting

Daria DiBiasio received the Warren Prize for the best undergraduate oral presentation at the recent annual meeting of the New England Estuarine Research Society (NEERS). The Warren award has been given out annually since 2002 at the NEERS annual meeting. Daria is the fifth student from Dr. Oakley's lab to win a prize at NEERS in recent years. Alyson Augenstein won the Warren Prize for best undergraduate poster in 2019, Jack Cerra won the Rankin Prize in 2021, Emily Watling won the Rankin Prize in 2023 and Olivia Gentile received an honorable mention for the Warren Prize in 2024.



Left: Daria Receiving her award from the NEERS Leadership team. Right: Daria in the lab working on sediment cores for as part of her research

Congrats to our Honors Scholars!

The University Honors Program offers an enriched course of study for academically-talented, intellectually-curious, and research-oriented curious students. Honors Scholars take courses especially designed to encourage creative and critical thinking, communication, and self-directed learning, and they complete an original research project in the form of an Honors Thesis. Through the Honors Program, students become flexible and creative thinkers capable of dealing with complex problems, designing and implementing long-term projects, and becoming life-long learners and leaders.

Hailey Cocca (Faculty Mentor Peter Drzewiecki)

It was an eventful year for graduating senior Hailey Cocca. As an Honors student, Hailey completed her thesis conducted in the Pyrenees Mountains in northeastern Spain. She was mentored by Peter Drzewiecki, and her goal was to document evidence that sedimentary environments were changing in response to a growing anticline before regional compression that created the Pyrenees. A week in the field, along with EES student Emma Bean, was followed by a semester of data analysis and thesis writing. For her efforts, Hailey was awarded the Outstanding Thesis Award, the highest honor a student can get in the Honors program.



Daria DiBiasio (Faculty Mentor Bryan Oakley)

Daria completed her thesis, examining paleostorm records from back-barrier coastal environments at two locations in Rhode Island. She and her mentor Bryan Oakley, along with students Cameron Soulagnet and Olivia Gentile conducted fieldwork collecting sediment cores and then analyzed the cores in the lab using a variety of physical and isotopic parameters. Daria presented her research at the joint meeting of the North-east and North Central sections of the Geological Society of America annual meeting, as well as at the new England Estuarine Research Society annual meeting, (where she won the best undergraduate poster award!) Upon graduating, Daria took a job working for the Narragansett Bay Commission helping to protect one of New England's largest estuaries!

Undergraduate Research

Hailey Cocca (assisted in the field by Emma Bean)

Mentor – Peter Drzewiecki

Hailey Cocca completed an Honors thesis mentored by Peter Drzewiecki examining facies and depositional features on and around the Sant Corneli and Bóixols anticlines in the south-central Pyrenees trying to pinpoint when they started to form. She was assisted in the field by EES student Emma Bean. For decades, there has been debate regarding evidence that suggested the anticlines were forming before the onset of regional compression. Hailey was able to document shallow rudist reef facies restricted to the top of the Bóixols anticline and syndepositional slumps scars on the southern flank of the anticline that both imply the topography in the region was rising above the surrounding sea floor before the collision that formed the Pyrenees. Evidence of subsurface salt movement, documented over the past few years, provides a mechanism. The new interpretation is that an episode of salt tectonics created salt anticlines that were later incorporated into a major thrust sheet complex, masking their origin. While conducting fieldwork, Hailey and Emma were able to experience the history and culture of this area of Spain. They presented their findings at the March 2025 Joint North-eastern and North-central Geological Society of America meeting in Erie, PA and at Eastern's CRE-ATE Conference.

Top – The research team composed of Peter, Hailey, and Emma; Hailey and Emma reviewing notes in the field. Bottom – 13th century Orcau Castle; Emma holding a large rudist fossil; Hailey collecting structural data.



Undergraduate Research

Hunter Piscatelli and James Bragg-Phillips

Mentor – Peter Drzewiecki

This summer, Hunter Piscatelli and James Bragg-Phillips conducted 4 days of fieldwork in the Catskill mountains of eastern New York examining carbonate beds in Devonian continental strata. These beds are interpreted to be lake deposits and soil carbonates that formed on floodplains to the west of the growing Acadian Mountains. The late Devonian is a critical time for life on land. During this time, plants developed strategies to survive away from surface water and the first forests spread across the landscape. Vertebrates (amphibians) crawled out of the water and colonized the land. During this time, the first modern terrestrial ecosystems developed. In fact, the field area contains the oldest known forest floor in Earth history! Carbonate rocks can record details about the climate that existed at the time of their deposition, and the goal of this project is to gain what information we can regarding this. We are working along with New York State Museum geologist Chuck VerStraeten who has been working on these rocks for over 20 years.

Top – Chuck explaining local geology to Hunter and James on Catskill Creek; Hunter and James resting at the creek. Bottom – Hunter and James describing the East Windham outcrop; tree root patterns from the oldest known forest.



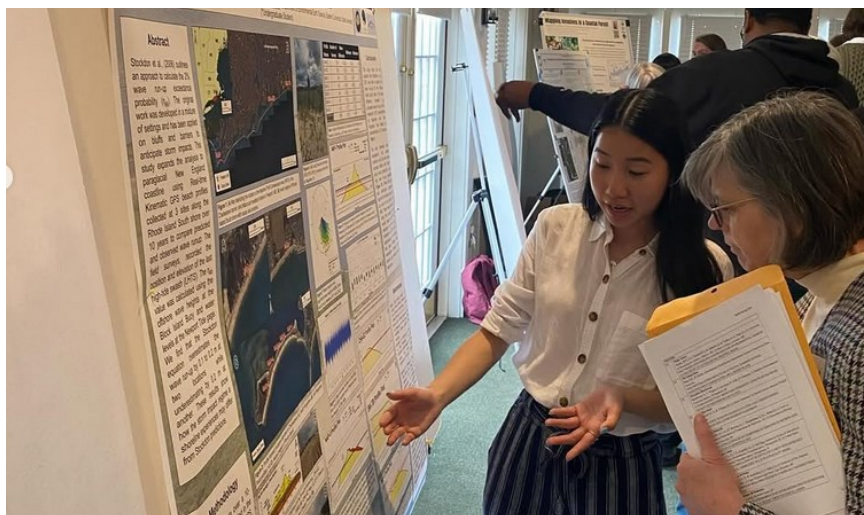
Undergraduate Research

Olivia Gentile

Mentor – Bryan Oakley

Olivia completed a project comparing the relationship between the Stockdon et al., (2006) predictions for wave run-up against hundreds of beach survey data collected since 2013. This is important verification for a widely used empirical formula often employed to estimate storm impacts and the likely occurrence of overwash of coastal features. Olivia presented her work at the 2024 Northeast Geological Society of America meeting and the 2024 annual meeting of the New England Estuarine Research Society, where she received an honorable mention for the best undergraduate poster award. Along the way Olivia also assisted with ecological monitoring at Napatree Point, helped with sediment coring (and in the lab) and looked at dune changes on Block Island using LiDAR.

Left: Olivia in the field with the trusty Trimble R10 RTK-GPS, Right: helping survey the Napatree Lagoon with Watch Hill Conservancy scientists Alan Desbonnet and Peter August. Bottom: presenting her poster at NEERS



Undergraduate Research

Emma Bean

Mentor – Bryan Oakley

Following a series of extra-tropical storms in December 2023 and January 2024, Emma Bean began documenting the recovery of the Napatree Point Conservation Area. Much of the barrier was overwashed and a substantial concern in the community was that Napatree was 'destroyed'. Emma's work was presented at Northeast Geological Society of America meeting and the 2024 and 2025 annual meetings of the New England Estuarine Research Society. Her results showed that the vegetation on the dune/barrier recovered quickly, although it will take years to recover the dune volume and elevation. Emma starts graduate school at Michigan State in the fall, where she will continue her work on coastal erosion.

Left: Top: Emma presenting her poster at NEERS. Bottom, in the field in January 2023 measuring elevation profiles on washover fans at Napatree Point.



Undergraduate Research

Daria DiBiasio (assisted by Olivia Gentile and Cameron Soulagnet)

Mentor – Bryan Oakley

Daria, as part of her honors thesis examined sedimentary records from coastal environments. The primary site for this work was a freshwater wetland dominated by *Phragmites australis* (Common reed), an invasive plant, which was located at the western end of the Napatree Point Conservation Area. Napatree has long been a field site for Dr. Oakley and his students, and several recent alumni have worked for the Watch Hill Conservancy, who manages Napatree (including Daria!). While some potential storm layers were identified, the real finding was that the prominent sand layer that underlies this marsh was NOT a storm deposit, as hypothesized, and was instead likely the result of wetland filling in the late 19th century when Fort Mansfield was constructed on the western end of Napatree to protect Long Island Sound. The filling of the wetland likely changed the local hydrology, and subsequently allowed the invasive *Phragmites* to take over the marsh. This is an important finding, and furthers the conservancy's science-based management of the site.

Left: (L-R) Olivia, Daria and Cam with some recovered cores). Right (L-R) Daria, Olivia and Cam driving the cores into the salt marsh)



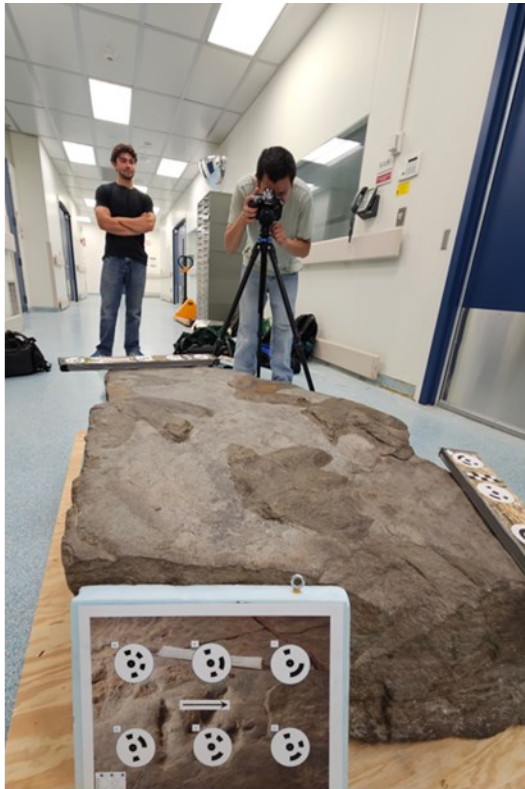
Undergraduate Research

Matthew Tardella and Kelvin Carranza-Martinez

Mentor – Drew Hyatt

Mathew Tardella and Kelvin Carranza-Martinez continued on research work started in the summer of 2024 with Dr Hyatt. Initial field work involved imaging and surveying eroding coastlines at Block Island – some of which included photogrammetric imaging while flying around the island in a doors-off helicopter! As well Kelvin and Matt used a drone to capture and subsequently analyze a local lake, and they captured ground-based images of a dinosaur track sample at the Yale Peabody Museum for photogrammetric modelling. These activities were the basis for follow-up practicum courses by both students in the fall and spring semesters, during which Matt and Kelvin learned how to utilize their images to build and analyze a variety of 3D models related to the summer field work. Their work led to a joint poster presentation at the Spring 2025 CREATE meeting at Eastern.

Views of Mat and Kelvin at Yale Peabody (dino track sample), in the doors-off helicopter (bottom), presenting their poster (top right) and at Andover Lake with the RTK GPS antenna (and some old guy!).

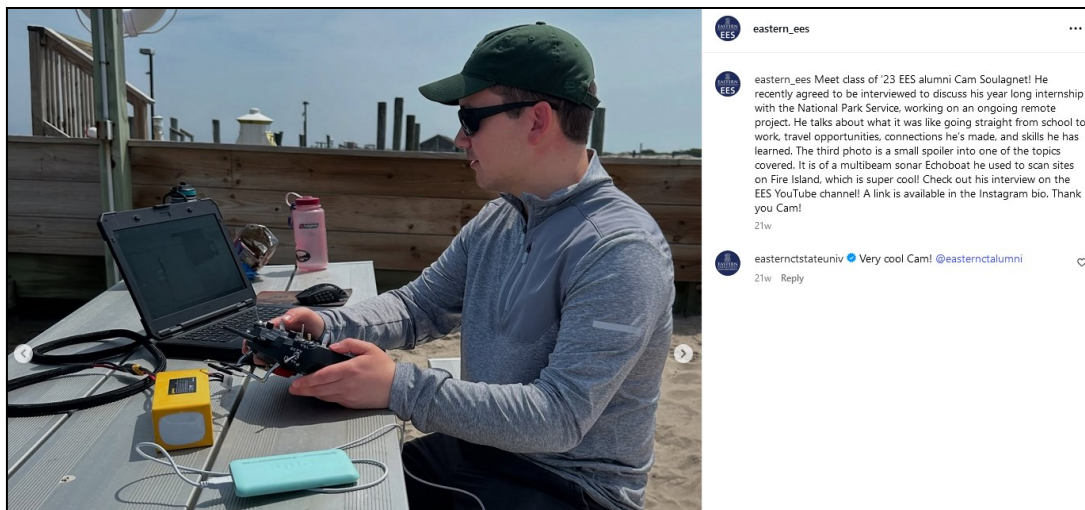
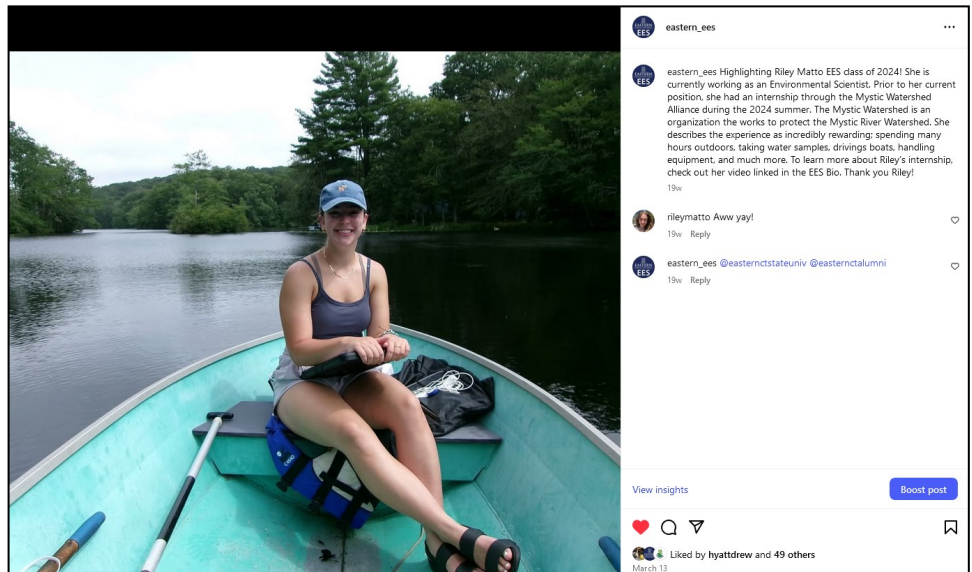




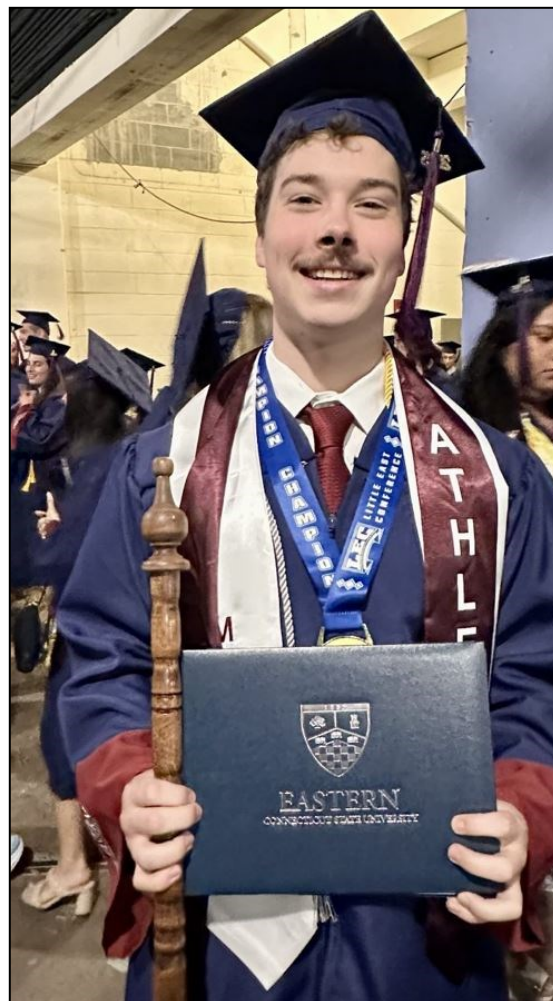
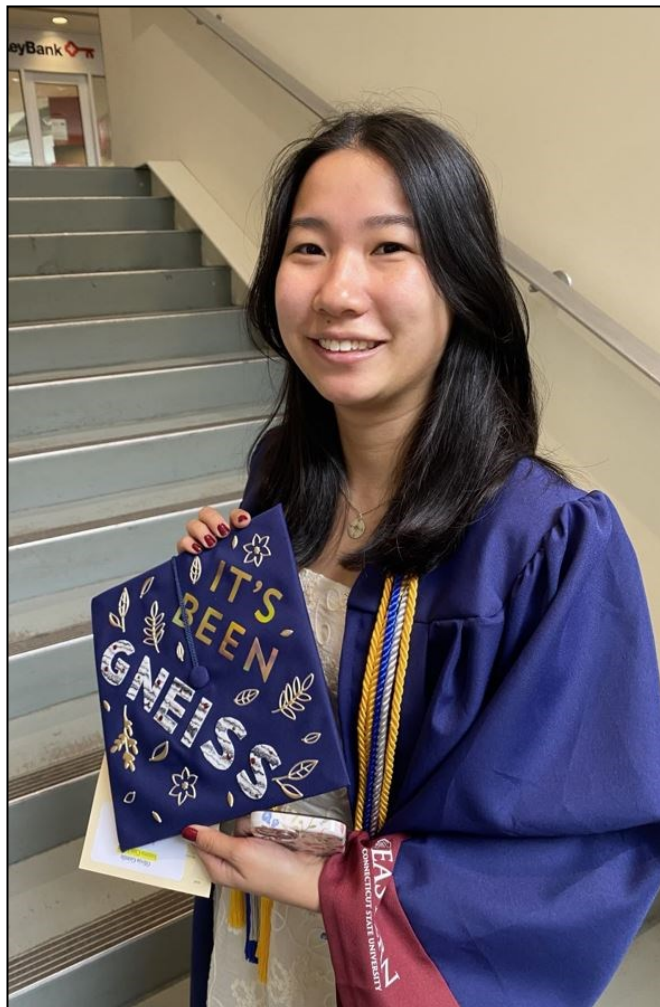
During the spring 2025 semester, **Kayla Redanz-Sweat** served as our inaugural EES Social Media Intern. Working with Dr. Oakley she created content and interviewed EES Alumni about their experiences at Eastern and beyond.

Focusing on our **@eastern_ees** Instagram account has increased the number of people who have seen posts discussing current students, department activities and department events. Using the 'Insights' tool within Instagram, an >8,000 people who do not follow our account saw posts during the spring semester (as of 6/2/2025). The alumni profiles garnered the highest view totals. This does not count posts shared to our account by other university Instagram accounts, including posts regarding Hailey Cocca's (an EES Major) appearance on 'The College Tour'.

Left: Kayla. Example post highlighting EES Alumni Riley Matto (Right) and Cameron Soulagnet (Bottom)



Congrats to all our 2025 Graduates! You join a network of more than 800 alumni that have graduated from EES over the last 50 years! We look forward to seeing all that you will accomplish!!! Best of luck!!!!



"May your dreams be larger than mountains and may you have the courage to scale their summits." – Harley King

EES Says goodbye to Zosia Carlquist

This year marks the first time since 2000 that Zosia Carlquist has not been the EES Department Secretary, as she began her retirement in July. Zosia also supported Physical Sciences and the Honors Program. Besides being the consummate professional, Zosia was the caring, thoughtful, always reliable, supportive glue that bound EES together, ensuring the faculty and students were always supported! We hope to see her back part-time this fall as HR searches for someone to fill Zosia's role, (although her shoes will be impossible to fill!!!!) Everyone in EES wishes her warm winds and following seas in her retirement!

Zosia was also recognized (well deserved!!!!) with an award Excellence in Service to the University, and is shown below with President Ismaili receiving this award.



Check out Eastern (and EES) on the 'College Tour'

This spring, Eastern (and EES) was featured on an episode of 'The College Tour', the hit Amazon Prime series that showcases colleges and universities across the country.

Hosted by Alex Boylan, this episode gives you an inside look at Eastern's academics, student life, athletics, and career opportunities—all told by the students who call it home.

For over a year, Hailey was busy preparing for her roll in an episode of Amazon's The College Tour. This video series features colleges and student experiences from around the country. Eastern was featured in season 14 (episode 7). Hailey and 9 other students were given the opportunity to promote Eastern by telling their stories. Hailey did a fantastic job highlighting Eastern and her time in EES. Hailey plans to leave the glimmers of Hollywood and the mountains behind and enroll in law school to earn a degree in Environmental Law. Check out the video via the QR code below (or on the Eastern website!).



Supporting EES Students and How to Contact Us!

The EES Department faculty are committed to providing our students with practical research projects, field, and presentation experience as often as possible. Many of the activities our students participate in are supported through EES Founders Fund, which was established for these purposes. We welcome your tax-deductible donations to this fund and encourage you to contact Mr. Joseph McGann at Institutional Advancement (860-465-4514) or email him at (McGannJ@easternct.edu), if you would like to learn more about how to contribute to experiences that open minds and support career development for new generations of EES students. Thank you in advance!

Eastern EES Facebook Page: Alumni, if you are not currently a member of the Eastern EES Facebook page, please email Bryan at OakleyB@easternct.edu and he can send you the link. The Facebook page is a great way to stay connected to the department as well as a growing resource for EES related jobs.

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