

A satellite photograph of Earth at night, showing a large dark landmass in the center surrounded by a dense network of city lights. The Earth's curvature and the thin blue atmosphere are visible at the top of the frame.

ZENITH

Department of Geography

2021-2022

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Letter from the Department Head

Dear Alumni and Friends of Geography,

We hope that your summer is going well. This year we eased back into more pre-pandemic-like operations while continuing to make some adjustments for positive COVID-19 cases among students in our classes. Similarly, the College of Arts and Sciences resumed its Hall of Fame Ceremony, and it is a pleasure to tell you that Tracy Burris (B.S. Geography 1991) received a Distinguished Alumni Award. Please look inside to read more about his work and accomplishments.

Additionally, we had a record-setting number of Phi Beta Kappa initiates—seven!—from our department this year. Phi Beta Kappa is a distinguished honor society. Also to much acclaim, the Geo & Global Studies Club helped host an Open House for current and prospective students each semester. These were very well attended and the Club’s officers led tours of the department and faculty shared how they became interested in geography, global studies, GIS, remote sensing, and more.

The department teamed up with our geography colleagues down the road in Norman to co-host the SWAAG regional conference in OKC. For many of us this was our first “real” (i.e., in-person) professional conference since the pandemic and it was a very refreshing experience.

We are saying goodbye to two of our staff members and two recently retired faculty. GIS Specialist Hank Yang and Administrative Support Assistant Laura Kreutzer are moving on to other positions. Our two retirements include Drs. Steve Stadler and Tom Wikle. Dr. Stadler retired in October, having contributed 40 years of service to the department including long-term service as Coordinator of our Physical Geography labs and field trip. He was also a founding member of the Oklahoma Mesonet, which provides real-time weather-related data from more than 100 monitoring stations around the state. Dr. Wikle retired in February, having logged nearly 22 years of work in the College of Arts and Sciences Dean’s office as well as two terms of service as Head in our department. Dr. Wikle was also a prime force in the creation of our very successful GIS Certificate. To Hank, Laura, and Drs. Stadler and Wikle: enjoy the adventures ahead!

As we look forward to the fall, we are excited to welcome two new assistant professors: Dr. Saber Brasher (PhD, University of Delaware) and Dr. Peter Crank (PhD, Arizona State University). Dr. Brasher is a climate scientist with research and teaching experience in climatology, physical geography, and hydroclimatological studies emphasizing the cryosphere. Dr. Peter Crank is an urban climatologist studying the linkages between urban design, urban climate, and mental health as well as modeling for urban climate analysis.

If you haven’t done so in a while, please check out our new departmental website. It has been given a complete redesign. We hope that you enjoy the *Zenith* and, as always, we so appreciate hearing from you. You can follow us on FB/Meta (OSUgeog) or Instagram (geographyosu).

Sincerely,

Alyson Greiner

Professor and Department Head



Scholarships

Alumni Support Makes a Difference!

Your contributions to department funds such as the Geography Excellence Fund as well as scholarships named for Jerry Croft, Orville Dee, Robert & Lucy Fite, Alyson Greiner, Robert (Bob) Norris, John Rooney, Susan Shaull, and Steve Tweedie enable us to support our current students and enhance their education.

Thank you so much for your support!

Congratulations to Our Spring Awardees!!



Alyson L. Greiner Undergraduate Travel Scholarship
Emily Gile &
Latasha Binford (not pictured)



John F. Rooney Jr. Scholarship and Outstanding Junior
Gabby Boyd



Outstanding Senior
Jacob Shepherd



Dr. Robert E. Norris Memorial Scholarship for First Year Graduate Student
Ny Aina Rakotoarivony



Jerry Croft, OSU Professor Emeritus, and Family Award in the Teaching of Geography
Brice Zoungrana



Norris Conference Travel Award
Kianoosh Hassani &
Ny Aina Rakotoarivony



Susan Shaull Outstanding Graduate Teaching Award
Emma Riddle



Certificate of Recognition for work in the Critical Geographies of Race and Racism
Katrina Ward

Not pictured:

Dee Family Endowed Scholarship
David Campbell

Robert & Lucy Fite Scholarship
Sophie Rice & Tupu Maiai

Additional Student Excellence

College of Arts and Sciences Awards

Lily Chavez, Global Studies & Political Science
CAS Outstanding Freshman

Jacquelyn Harsha, Geospatial Information
Science & Spanish
CAS Outstanding Junior

Jacob Shepherd, Global Studies
CAS Outstanding Senior

Reagan Page, Political Science & Global Studies
CAS Top 10 Senior

Phi Beta Kappa Initiates

Lydia Blew, Global Studies

Caitlyn Brooks, Global Studies

Abigail Lesnick, Global Studies

Camille McCullough, Global Studies

Kawai Porter, Geography

Ethan Renner, Global Studies

Jali Robertson, Global Studies

Graduates of the 2021-2022 School Year:

Summer 2021

Sarah Wyssmann – B.S. Geography

Yanxia Wu – Ph.D. Geography

Fall 2021

Lane Kendall – B.A. Geography

Derek Pugh – B.S. Geography

Austin Smith – B.S. Geography

Kandelyne Bishop – B.A. Geography

Kayla Hoelscher – B.A. Global Studies

Darrell Jones – B.A. Global Studies

Serah De Guzman – B.A. Global Studies

Spring 2022

Harlen Rebek – B.A. Global Studies

Gabriel Knight – B.S. Geography

Christine Giles – B.A. Global Studies

Kyle Stoner – B.S. Geography

Audra Messenger – B.A. Global Studies

Zac Carnahan – B.S. Geography

Ethan Renner – B.A. Global Studies

Reagan Page – B.A. Global Studies

Maxwell Browne – B.S. GIS

Kawai Porter – B.S. Geography

Tanner Hurst – B.S. Geography

Stephen Stumpf – B.A. Global Studies



Undergraduate commencement May 2022

GIS Certificate Earners:

Fall 2021

Josie Rice

Spring 2022

Gabriel Knight

Maxwell Browne

Maggie Chamberlain

(Graduate Certificate in GIS)

2021 Distinguished Alumni

Tracy Burris—B.S. Geography, 1991



Tracy Burris graduated with a B.S. in Geography from OSU in 1991 and went to work for the Chickasaw Nation as a program planner. He served as Gaming Commissioner of the Chickasaw Nation from 1993 – 2008 and joined the Viejas Tribal Government as Gaming Commissioner from July 2008-12. He served on several tribal gaming commissions as a commissioner and advisor, and he returned to Viejas tribe from 2015-19 and is currently Executive Director of the Muscogee (Creek) Nation Office Public Gaming.

He served on the National Indian Gaming Association Executive Committee from 1995-2008 and served as the Treasurer of NIGA 2006-2008. He has also been a long-time board member of Oklahoma Indian Gaming Association, having served as vice chairman in 1995-96, chairman from 1996-2003, and as an executive delegate at large from 2003-07.

He served as a board member for the National Tribal Gaming Commissioner/Regulators Association as the gaming advisor to the State of Oklahoma Indian Affairs Commission. He also served on the first and third National Indian Gaming Commission's MICS advisory committees.

He has spoken and written about gaming regulation and the gaming industry. He has provided testimony three times before the Senate Committee on Indians affairs on Class II and Class III gaming issues and on other occasions provided testimony before the NIGC field hearings on Class II and Class III gaming issues.

He worked on with the California Tribal/State Regulators Association Task Force on CGCC-8.

He is a member of the Chickasaw Nation. He has three children and two grandchildren.



Alumni News & Memories

Keith Hendrickson (B.S. Geography, 1976) I retired from the USAF in Jun 2020 after 44 years (20 yrs. - Active Duty/14 yrs. - Gov't Ctr/10 yrs. – USAF Civilian Service). After graduating from OSU in '76, I entered active duty as one of only 65 Cartographic/Geodetic Officers in an Air Force of 585,000 people. After completing training at the Defense Mapping School at Ft. Belvoir, VA., I held numerous tactical or strategic cartographic and target intelligence jobs at Offutt AFB, Nebraska (x4), Philippines, Korea (x2), and Germany. I then spent 10 years as a principle software targeting engineer working for U.S. Strategic Command/J5 before moving from Nebraska to Virginia to become the Deputy Director of Operations for the Air Force Targeting Center and Director of Mission Support in the 363d Intelligence, Surveillance and Reconnaissance Group at Langley AFB.

While I held many jobs and many titles while in the USAF for 44 years, geography always played a key role in warfare, in flying operations and in weapons delivery. I've saw and participated in many changes in how 'geographic data' was utilized over the course of so many years. Technology has so transformed everything that we do. It's almost unfathomable how rudimentary things were 50 years ago. I remember buying my very first calculator for a quantitative-statistics class in Geography at OSU in '74. A TI-11 that cost \$110.00 and only did traditional math functions plus square, square root and median calculations. Also having to punch out IBM punch cards to drop off at the computer lab to be processed overnight. Heaven forbid if you got a card out of place or made a typo. Not three years later in the USAF, I'm using an HP-67 with loadable magnetic strip programs that allowed one to calculate tactical weapons trajectories, weapons effects and perform Monte Carlo probability on the success of your results. As a weaponeer, we used 'Orange Books' known as Joint Munitions Effectiveness Manuals (JMEM) that were actually produced at the Oklahoma State University Extension Office in Stillwater (hence the **orange covers**). Sometimes – it's a very small world. Of course the nuclear side of weaponeering is a whole different story and was a whole different era.



Aeronautical Charts that I helped produce in the 70's could have as much as 10,000' error on location accuracy, particularly in countries where you could not access geodetic survey information. Today, your cell phone and Google Earth can locate you within feet of pretty much anywhere on the earth. I was one of those guys in the 70's who spent months creating a single chart scribing contour lines and man-made feature into Mylar overlays with a ruby-tipped scribe; resulting in offset printing of 5-color separation charts. Not that those types of products aren't still produced on a limited basis – but now most everything is digitized and automated as your current students know well.

It's nice to see that many of the professors I had in the 70's now have scholarships or awards named for them. (John Rooney, Steve Tweedie, Dick Hecock, Jerry Croft, James Stine, George Carney, Keith Harries and others.)

Since retiring in 2020, my wife Mona and I stay engaged in the Southeastern Virginia Chapter of the OSU Alumni Association and help host the bi-annual tailgate to Morgantown WV; we also fund raise for OSU scholarships for Virginia students interested in attending OSU. We hope to see more traveling once this pandemic gets under control – which will include more trips to Europe, around the US and OSU homecoming. I also spend a lot of time cooking and perfecting my wood-fired pizza.

Hakeem Ajijola (B.S. Geography 1985) published a paper with Dr. Nate D. F. Allen, titled, "African Lessons in Cyber Strategy." The paper is available from the Africa Center for Strategic Studies.

Anil Raghavan (M.S. Geography 2004) Anil has taken a new position as Director of Data Engineering at CiraConnect in Dallas.

Alumni News & Memories, continued

Pam Journey (M.S. Geography 2006) In the fall of 2020, I began the PhD program in Regional and City Planning at OU. Entering the RCPL program at OU, I wanted to learn the foundations, philosophy, and practices of the planning profession with the long-term goal of earning the AICP Certification (American Institute of Certified Planners). While working full time, I took 6 hours for both semesters (2020-21). After a year of studies, in June I realized that I already qualified for the AICP based on my master's degree and work experience. In November 2021, I passed the AICP exam, and I am now a certified professional planner. My focus, both professional and academic, is on Walkability in Indian Country. Since I left OSU in 2007, I've been working in the field of tribal transportation. As part of a small business, Cross Timbers Consulting, we work closely with several Oklahoma tribes, and I've traveled the country working with various tribes. My OSU geo-baby who was born in 2006, 3 months before I defended my thesis, turned 16 this year!

Ranbir Kang (Ph.D. Geography 2007) I have relocated from Illinois and am now a faculty member at Kennesaw State University located outside Atlanta.

Student Organization Updates

FOGG News

This academic year, the Forum of Geography Graduate Students (FoGG) organized and participated in multiple events.

FoGG officers baked various treats and helped tend to the table for Gamma Theta Upsilon's (GTU) bake sale this past September.

In November, FoGG Vice President/Secretary Stephanie Grace compiled a collection of questions for GTU'S GeoBowl event.

FoGG's final interest meeting of the semester was held in April at Fuzzy's Taco Shop on "The Strip." FoGG President Erin Templeton and FoGG Vice President/Secretary Stephanie Grace outlined officer roles and corresponding duties to those who were in attendance in preparation for August 2022 elections, accompanied by chips and guacamole.

Also in April, FoGG collaborated with GTU to host an evening potluck event at Boomer Lake. So many people in our department attended and brought generous (and delicious) food contributions! Those who attended enjoyed music, a cornhole tournament, and windy but pleasantly warm weather.



Cornhole tournament winners included:

1st place: Belem and Dr. Hu, "Team Tornado" (top right)

2nd place: Emmanuel and Ehsan, "Team GIS" (left)

3rd place: Katrina and Brice, "Last But Not Least" (right)

FoGG Officers Fall 2021-Spring 2022:

President: Erin Templeton

Vice President/Secretary and Delegate: Stephanie Grace

Treasurer: Katrina Ward

Representative: Kira Ehrnsberger

Student Organization Updates

Geo & Global Studies Club News

Due to COVID-19, Geo & Global Studies Club events were limited this school year. They sponsored a couple of Geography Department Open Houses. The Open House in February had 40 students from Jenks High School in attendance. The club also assisted GTU and FoGG with the homecoming tailgate and a bake sale.

Geo & Global Studies Officers Fall 2021-Spring 2022:

President: Gabby Boyd

Vice President: Elise Neighbors

Treasurer: Jacob Shepherd

Secretary: Caitlin Brooks

Events Chair: Perri Lewis



Jacob, Gabby, and Elise at Homecoming.

Gamma Theta Upsilon (GTU) News

This year, GTU sponsored events included an information table about the department, a bake sale, and Geography week events. GTU also had 14 new inductees in April 2022.



New GTU members inducted April 21:

Back row (Left to Right) – Dr. Thomas LaVanchy, Emmanuel Kumi, Tanner Hurst, Elise Neighbors, Sydney Galente, Jacob Shepherd, Ethan Piske, Wenqi Liu, and Ehsan Foroutan.

Front row (Left to Right) – Emma Riddle, Erin Templeton, and Ny Aina Rakoarivony.

Not pictured – Abigail Hobbs and Nicholas Johnson.



Students competing at the annual Geobowl during Geography week.



Stephanie Grace talking to a customer at the bake sale.



GTU President Brice Zougrana talking to a student at the information table.

Geographers in the Field

By the ARID* Research Team

(*Agroecosystems and Resilience in times of Drought
Funded by USDA National Institute of Food and Agriculture)



Chloe Taylor

Geography Undergraduate Exchange Student from Loughborough University, UK

Heading into the field with the ARID project provided the opportunity to gain an insight into what professional fieldwork looks like. The time spent in the field study area gave a new perspective of how fieldwork is completed through seeing first-hand how researchers interact with participants. Not only did I get to interact with various farmers and ranchers in the Southern Great Plains, but it also provided me with the opportunity to build relationships and connections with the rest of the ARID project team. We even made some amazing memories outside of the completion of the fieldwork through the exploration of a new side of the US I had not been exposed to before. Sitting in a 2022 Corvette and climbing into a volcano crater would definitely be considered as some of my trip highlights. I have rarely had the chance to complete human-environment based research before; therefore, carrying out repeat household surveys looking at long term adaptation to drought facilitated learning new skills. Being given the opportunity to participate in the ARID project allowed me to gain valuable experience which I will take forward with me in the future, as well as making me excited for future fieldwork and research prospects. As an exchange student my time within the geography department has come to an end. I have enjoyed every second of being a student at OSU and am extremely grateful for the friendly welcome I received from the entire department, alongside the opportunities I have been given over the last year.



Dinosaur tracks spotted at Clayton, NM and sunrise at the Great Plains Bunkhouse, Wheelless, OK. Photos by Chloe Taylor.

Jacob Shepherd — Global Studies Undergraduate Student

This summer, I was fortunate to work as part of the ARID Project to learn how farmers and ranchers in Oklahoma, New Mexico, and Colorado are adapting to increasingly prevalent drought conditions. This was my first experience with fieldwork and human-environment-based research, and I'm glad to say it was a very enjoyable experience. The survey participants were extremely kind and thoughtful, and showed a deep love for the land that their families had lived on for generations. Drs. Jackie Vadjunec and Todd Fagin were both very helpful and taught me so much about fieldwork methods and procedures. Chloe and Belem were also both great teammates, and many laughs and jokes resulted from our time together. I hope to be able to use some data and experience from this fieldwork to create a presentation for a regional conference in the fall and to complete my Honors Thesis in the spring. Finally, I hope that the work we've done, and are continuing to do, will provide positive impacts for those we are working with so that they can maintain their operations through this difficult drought.



A section of the stone wall geologic feature present in Stonewall, CO (left). Looking west from tri-state monument, which marks the meeting of OK, CO, and NM (middle). A thunderstorm developing west of Boise City, OK, providing much needed rain (right). Photos by Jacob Shepherd.

Georgina Belem Carrasco Galvan — Geography PhD Student

The ARID research done with Drs. Jackie Vadjunec and Todd Fagin, as well as fellow students Brian, Chloe, and Jacob, this summer was surprising, challenging, and rewarding; it allowed me to visit places otherwise often overlooked in travel plans. Much of the Southern Great Plains is not on the list of top touristic places to visit while in the U.S.A., yet the charm and unique beauty make this region memorable. The ocean of grass and vast open spaces was one of my first breathtaking surprises. The overwhelming openness, allowing the spectators to see as far as they can see, warmed my heart reminding me of my beach hometown in Mexico.

The fieldwork opened door after door of hardworking, friendly, and exceptional people's houses and workspaces. Filling the days with hours of talk and shared memories and experiences related to adaptation to drought. Driving in lonely and remote places with my teammates left room for contemplation, reflection, silence, conversations, wildlife admiration, and landscape wonderment. And also for laughs, oreo cookie breaks, wow moments, photograph stops, shared stress to be on time and to show up to the right place (especially when cell phones failed us out in the canyons).



Ethnographic fieldwork also carried personal challenges. The biggest challenge was getting directions right over the phone. They included strange words to me, at least back then, that made no sense. Some of those words were “grain elevators” and “cul-de-sacs,” along with unfamiliar street names spelled so quickly, and miles and miles of roads into a far and unknown destination. As with anything in life, practice makes perfect, so after a while, I got better.

The ARID field team spent long days working and driving, debriefing, planning, making phone calls, reviewing surveys, cooking, eating, and bonding. Countless little moments made this summer unforgettable! I did not know what to expect when I enlisted for this summer fieldwork, but the rewards are engraved in my memory and heart.



Photo and montage by Belem Carrasco.

Geographers in the Field

By Dr. Thomas LaVanchy

I was able to travel to South Africa over spring break to (1) disseminate previous research findings, (2) extend my networks for potential research collaboration, and (3) introduce my advisee, first-year MS student Emma Riddle, to my research site in Cape Town.

Giving back to the community

My research team conducted interviews (n=501) on water insecurity in a township in Cape Town in 2019. A central purpose of the research was to identify the risks and challenges faced by community members during the historic “Day Zero” drought event that occurred from 2015-2018. My team has published several articles on our findings, but have been unable to return in person to the community due to the COVID pandemic. Over spring break, we were able to meet with members of the community to share our findings and to check in on their current experiences with water. I enjoyed being back together with community members and hearing about their families. What I took away from the conversations was that water security was challenging even before Day Zero and remains difficult today. Although Cape Town municipal water is safe to drink, it often remains unaffordable to traditionally marginalized groups, thus leaving them water insecure.



Lunch meeting with community members in Langa Township, Cape Town, South Africa.



Meeting with Dr. Kevin Winter (left) of University of Cape Town at the Water Hub (research site) in Franschoek.

Extending the network

I was able to meet with several faculty from University of Cape Town to discuss research ideas and potential collaborations. Each of them is involved in various aspects of water and its connection to society. These visits reminded me again that Capetonians are a thoughtful, inclusive, and fun group of people!

Introduction to new landscapes

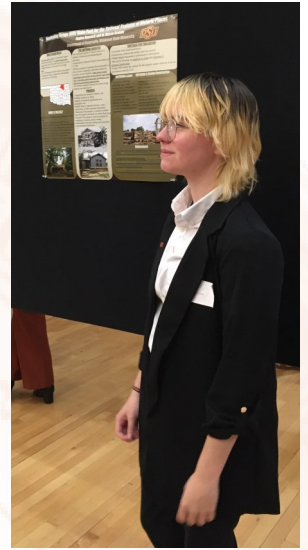
I invited Emma to join me on this trip to meet my research team and get a sense of the opportunities to research water-related topics in a unique, global setting. (I remember being a first-year doctoral student and getting invited by my advisor to travel to Guatemala and Nicaragua. I ended up choosing a dissertation research topic from that trip). During this visit to Cape Town, Emma was able to see a variety of human-environmental issues and meet a range of people, in and out of the academy. I always enjoy introducing people to new places and seeing familiar places through the eyes of a new visitor. Thanks for joining me Emma!



View of the Twelve Apostles mountains from Clifton Beach behind Dr. Thomas LaVanchy and Emma Riddle.

Freshman Research Scholar

OSU has a Freshman Research Scholar Program (FRS) that enrolls about 60 students per year. Geography faculty have advised a number of these students over the years. This year, Kaylee Hancock, a Global Studies major with a Culture, Arts and Humanities emphasis, conducted research with Alyson Greiner on the work of the CCC at Osage Hills State Park. Her final presentation, delivered at the FRS Symposium, was titled, “Nominating Osage Hills State Park to the National Register of Historic Places.”

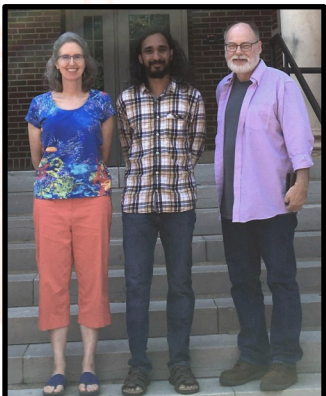


Visitors to the Department



Dr. Christian Rossi, a visiting scholar from the Swiss National Park, visited the Department in February–May 2022. Dr. Rossi obtained his Ph.D. in Remote Sensing from University of Zurich. His research focuses on using modern remote sensing technologies for ecological applications. Currently, he is leading projects on remote sensing of plant diversity, function, and ecosystem services in lpine grasslands. Dr. Rossi was hosted by Dr. Hamed Gholizadeh. Dr. Rossi worked on developing remote sensing models for monitoring biodiversity during his visit.

Dr. Mikhail S. Blinnikov visited the department and presented the lecture *Political Ecology of Moscow Parks* on March 21, 2022. Dr. Blinnikov is a professor at the Department of Geography and Planning at St. Cloud State University, Minnesota. He is the former director of the Global Studies at that institution and the author of *Geography of Russia and its Neighbors*, 2nd ed., Guilford Press. Dr. Blinnikov is collaborating in a geoarchaeological project with Dr. Carlos Cordova.



Subodh Ganta (M.S. 1991) visited the department over the summer and caught up with Alyson Greiner and Michael Larson. He is doing GIS consulting and living in Austin.

ConocoPhillips Geography Career Spotlight Speaker



We were honored to feature Dr. Diana Sinton as our speaker this year. Her presentation was entitled “Why GIS matters in Board Rooms, Battle Fields, and Bus Routes.”

Dr. Sinton is a Senior research Fellow with the University Consortium for Geographic Information (UCGIS) and Adjunct Associate Professor at Cornell University.

Her interests include the roles of geospatial technologies and spatial literacy in teaching and learning, the use of social and cultural data within GIS applications, and humanitarian mapping projects.

Dr. Sinton spoke on April 18 and also visited classes and met with students. Her visit was made possible with support from ConocoPhillips.

Department Colloquia

October 25, 2021:

Dr. Scott Sheridan

Professor and Department Chair, Department of Geography, Kent State University
“Heat Vulnerability in a Changing Climate – Can we Acclimatize?”

November 15, 2021:

Dr. Michelle Brym

Professor, Department of History and Geography, University of Central Oklahoma
“The role of Places of Worship in the Spatial and Functional Integration of Immigrant Communities: A Focus on Ethiopian Orthodox Chinese Methodist Communities in the OKC Metropolitan Area”

March 21, 2022:

Dr. Mikhail Blinnikov

Professor, Department of Geography and Planning, St. Cloud State University
“Political Ecology of Moscow Parks”

April 4, 2022:

Dr. Christian Rossi

Researcher at Swiss National Parks (Parc Naziunal Svizzer)
“Birds-eye View of a Protected Nature Reserve in the Alps: Quantifying the Effect of a Non-intervention Policy on Biodiversity”

Staff Updates



Barbara Goodnight is the Administrative Assistant for the Department of Geography. She handles New Hire packets, EPAFs and she keeps track of OK Corral orders. Barbara reconciles departmental accounts, helps with travel request/vouchers, foundation vouchers and keeps record of pcard charges and statements. Barbara works closely with the department head, Dr. Greiner, and Laura, the Administrative Support Assistant. She keep the main office organized and helps with keeping track of office supplies and inventory. She also keeps offices ready for new faculty and/or staff to occupy. If you have a question, she will help find an answer for you. Take a moment to stop by and say ‘hello’ and have a lifesaver.

Staff Updates, continued



Laura Kreutzer serves as the administrative support assistant for the department but will be moving to another position this summer. She will miss the department members and their friendly demeanor. This year was the first year the Geography Department has been a certified healthy department. Laura worked with Margit Schafer and Barbara Goodnight on this. Plans to be certified again for 2023 are under way. Laura was part of the website migration team that recently completed the new department website. This was Laura's second year to help design and copyedit the *Zenith*. Laura (on the right) won a raffle at a wellness walk in April 2022.

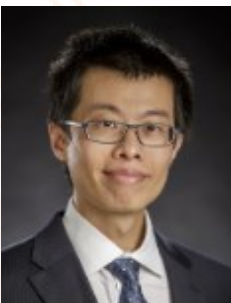


Michael P. Larson: November 2022, will start Michael's twenty-seventh year with the Department of Geography. While Michael performs cartographic work for the faculty members and students of the Department of Geography, he also continues to support faculty, staff and students from other departments on campus as well as work for various entities, large and small, public and private, off campus.

Continuing his role as an educator, spring 2022 was Michael's twenty-first year teaching the Computer Cartography/Mapping in Modern Society course. In addition to teaching, Michael continues to be involved with students in a variety of ways such as being the co-advisor for the undergraduate Geo & Global Studies Club. When he is not involved in Departmental and geospatial business, Michael enjoys spending time with his wife and family and time permitting, rebuilding his garden.



Jing Wang continues to serve as the Coordinator of the Center for Applications of Remote Sensing (CARS) and the State Coordinator for OklahomaView as part of the AmericaView Consortium. Last year she went on many field trips to collect data flying Unmanned Aerial Systems (UAS). Through spring and summer 2021, Jing used UAS's to monitor the growth of alfalfa during growing and harvest season. The UAS images are collected on bi-weekly basis in the experiment plot and have been used to build 3D models to estimate the total volume before and after each harvest. In November Jing flew the UAS at the city park of Stroud, OK. to delineate detailed surface elevation model. The project is in coordination with the Dr. Bo Zhang from the Department of Horticulture and Landscape Architecture to assist smaller cities in Oklahoma fully utilizing public recreational facilities. Jing also helps create and maintain the department website and the website for OklahomaView.



Hank Yang: I have been involved in Recreation Management Project since 2016. I enjoyed working with students, faculty members, and OK State Park personnel. I would like to give my thanks to you all and remember the time here. I usually spend my spare time with my children and wife either in ice skating or visiting different parks.

Faculty Updates

Dr. Jon Comer completed his 28th year at OSU in 2022 and is still waiting for conditions to improve to have another European adventure. He did travel to Clearwater (FL) in June 2021 (and has plans to go again in June 2022), spent Thanksgiving in Whitney (TX), and made the usual semi-monthly trips to the DFW metroplex. He remains Associate Head and on most other committees/councils on which he has served for many years, though his 5+ year officership (secretary, vice-chair, and then chair) on Group IV Graduate Faculty ended in May 2022. He was heavily involved in facilitating the online Applied Geography Conference in October 2021 as a Board Member and Secretary as well as jumping into that role for the SWAAG meetings, also in October 2021.



His teaching schedule has shifted a bit, as he offered his new online Europe class (GEOG/GLST 3723) in both fall 2021 and spring 2022. It is planned to continue into the future. Otherwise, he continues to terrify undergraduates in Spatial Analysis (3333) in the fall and Geographical Analysis (5303) in the spring.

At home, Shannon retired from teaching for SPS after 20 years in the classroom (10 at Skyline Elementary and 10 at Sangre Ridge), and they are adjusting to their new lifestyle and fuller house.



Cordova in the city of Perm, Russia, the gateway to the Ural Mountains. Behind is the Kama River, one of the main tributaries of the Volga River.

Dr. Carlos Cordova began his twenty fifth year at OSU-Geography with a sabbatical semester (Fall 2021). During this semester he worked on finishing his book *The Lakes of the Basin of Mexico: Lacustrine dynamics and the Evolution of Civilization*, which hopefully will appear in 2022, published by Springer-Nature. Additionally, he finished editing the book *The Legacy of the Basin of Mexico: Ecological Processes in the Evolution of a Civilization* (co-edited with Christopher Morehart), which has fourteen contributions, and is in the process of publication by the University of Colorado Press.

During his sabbatical Cordova did fieldwork in Russia (October) and Mexico (November). The latter project is meant to be developed into a large multidisciplinary project focused on the evolution of Lake Texcoco. He will be coming back to Mexico to continue research. Given recent events, projects in Russia are on hold for an undetermined time. In the Spring Cordova is teaching Current Geographic Research and Geoarchaeology and Environmental History. He has one PhD advisee and expecting two more in the coming semester.



Dr. Allen Finchum: During 2021-22 Allen Finchum continued his longstanding work with the Oklahoma State Historic Preservation Office as well as working on some other small research project of personal interest. Allen is still grateful for the support that Co-PI Mike Larson gives to the SHPO project and its ongoing success. After working on several small projects/papers with Jesse Andrew (OSU PhD Student) on vernacular regions and using online business data in “defining” the region these have become part of a much larger effort by Jesse to develop into his dissertation. He and Jesse had a poster for the 2021 ESRI Meeting and he and Michael Larson intend to attend the 2022 ESRI User meeting in July.

In 2021 Allen and Tanya’s son Curtis took continues to work as a high school teacher and basketball coach in OKC. After sitting out of watching high school basketball in 2020-21, Allen was able to begin attending games again in the past season.

Finally, 2021-22 will be Dr Finchum’s last year as a regular faculty member in the Department of Geography – he will be retiring from OSU effective 1 Sep 2022 and the Spring Term will be his final one as an instructor. Allen does plan to continue to work with the SHPO Project for 1-2 more years after his retirement, so he will continue to be around the department from time to time, but he is also looking forward to being able to take on some new challenges in the future.

Faculty Updates, continued

Dr. Alyson Greiner enjoyed another busy year juggling a variety of projects. Among other, she continued working as the PI with Regents Professor Emeritus Lowell Caneday and GIS Specialist Hank Yang on the RMP-GIS project for the Oklahoma Tourism & Recreation Department. We are in the final year of these projects. Sad to see these end but greatly appreciative of Lowell's visionary efforts which made them possible, Hank's important GIS work, and our several students who helped significantly with fieldwork. Alyson and life-partner, Luis, got to experience a thunder snowstorm atop Pike's Peak in mid-July. Earlier this year Luis was recognized with a DaVinci Fellowship.



Dr. Hamed Gholizadeh will start his fourth year in the Department in Fall 2022. Within the past year, Hamed spent most of his time on his NASA project, conducting research and leading field campaigns at The Nature Conservancy's Tallgrass Prairie Preserve to study grassland biodiversity and the impact of invasive species on prairie ecosystems using remotely sensed data.



Team member DeAndre Garrett flash freezing leaf samples and putting them on dry ice for pigment analysis.



Dr. Tao Hu will finish his first year at OSU after the summer. He enjoyed the transition from a postdoc to an assistant professor. During the past year, Tao developed two new online courses: Health and Maps, and GIS for Public Health. He taught the courses for the first time but received great support, encouragement, and suggestions from senior faculties in the department. Tao also published 8 peer-reviewed papers and attended the 2021 SWAAG Conference and 2022 AAG Annual Conference as a session chair. In addition, he submitted proposals to the Bill & Melinda Gates Foundation, the NSF, Mercury Foundation, and R1 Rural Renewal Initiative Program. In the upcoming fall semester, he is looking forward to his new role as an advisor of PhD students.

Certified Healthy Department

The Geography Department applied to be a Certified Healthy Department for the first time in March 2022. The department received a bronze recognition from OSU Wellness.

This certification is a recognition that the department has provided health opportunities, resources, and information for students, staff, and faculty members.



Faculty Updates, continued



Dr. Thomas LaVanchy completed his third year in the department and was successfully reappointed as an Assistant Professor. During the 2021-22 academic year, he enjoyed teaching and mentoring students as pandemic restrictions eased and life in the classroom resumed a bit of normalcy. Thomas was nominated for the Distinguished Teaching Award in the College of Arts and Sciences and served as advisor to five graduate students. He also received the Olen P. Matthews & Kathleen A. Dwyer Fund for Water Resources Award from the Water Resources Specialty Group of the AAG. After a two-year hiatus from international travel, Thomas was able to return to South Africa for fieldwork. He traveled in March 2022 to Cape Town with first year MS student Emma Riddle to disseminate previous research findings and develop new lines of research collaboration. Thomas was able to publish two articles in *Hydrogeology Journal* during the past academic year. Additionally, he and a colleague completed co-organizing a Topical Collection (TC) titled “Advancements in Hydrogeological Knowledge in Post-Earthquake Haiti” for *Hydrogeology Journal*. The TC brought together advancements of groundwater knowledge in Haiti to make data and knowledge publicly available and enable further research and better-informed investments to support the country’s development. Thomas and his wife Courtney continue to introduce their two daughters (11 & 13 yrs.) to the wide variety of outdoor spaces across Oklahoma.



Hiking along Little Manatee River.

Dr. Rebecca Sheehan: I continue to explore opportunities associated with regenerative memorialization. In February at the AAG virtual conference, I presented the paper, “Memory-Work on the Move through a ‘Tiny’ Actant: Building Regenerative Memorialization Capacity and The Equal Justice Initiative’s Community Soil Collection Project.” I argue that the soil is an important actant in making the past connected to the present, which serves to advance truth and reconciliation. Examining how the soil acts through and in its collection, I highlighted the agency of nonhuman and non-monumental actants in the constitution memory-work networks.

This summer I will spend a month in Birmingham, Alabama to research the Jefferson County Memorial Project’s work with the Equal Justice Initiative (EJI). In 2018, EJI dedicated the National Memorial for Peace and Justice (NMPJ) to mostly Black victims of racial-terror lynchings. Housed in a pavilion-style structure, the NMPJ contains hanging columnar memorials corresponding to over 800 counties where over 4,400 documented lynchings between 1887 and 1950 occurred. If visitors turn left at the end of the pavilion of hanging columns, they enter an adjacent field, where 800 duplicate columns are waiting, lying on the ground, to be reclaimed and re-placed by the individual counties across the US, largely in the South. Created in response to EJI’s clarion call and compelled by the lying columns and its own history of racial terror, the Jefferson County Memorial Project (JCMP) is Birmingham, Alabama’s grassroots effort to retrieve the county’s memorial column.



Mile Zero Highway 1.

My work aims to trace the intersectional (race, gender, class, etc.) discourses and processes that have shaped relocating the Jefferson County lynching monument to Linn Park, the park adjacent to City Hall. Accordingly, this research aims to trace the story of moving the monument as well as how the monument’s story interacts with other stories in the park and beyond. Ultimately, this research serves to show how particular mobilities in memory-work affects political and socio-cultural equality and equity through processes that shape and constitute the cultural landscape. This research has been generously funded by Oklahoma State University’s Research Jumpstart/Accelerator Grant.



Hemingway’s writing studio

On other fronts over the past year, I’ve done a lot of hiking and kayaking in Oklahoma and Florida! One highlight was providing kayak support for my partner, Emilie, in the Swim for Alligator Lighthouse – an eight mile swim of Islamorada in the Florida Keys! Though I got a bit seasick during the kayaking, I managed to successfully support Emilie in her 5 hours in the water! We also went to Key West (the first time for me) and toured Hemingway’s estate – which has 60 polydactyl cats!

Faculty Updates, continued



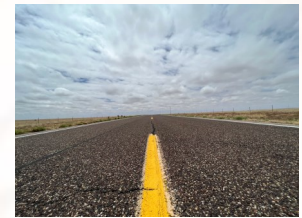
Dr. Jackie Vadjunec: The ARID project field team is happy to get back to serious field work in Union County, NM, Cimarron County, OK, and Las Animas County, CO this summer! Our research on adaptation to drought continues and according to the drought monitor, the region is already experiencing D4 (exceptional drought) conditions. During May, graduate students Belem Carrasco and Brian Birchler helped me to complete repeat (2018) household surveys with ranching and farming households in Union County, NM. In June and July, undergraduate students Jacob Shepherd and exchange student Chloe Taylor, as well as Todd Fagin from OU will be joining the group to complete household surveys as well as drone flights throughout the region. We've enjoyed reconnecting with families after a long hiatus due to COVID-19.



The ARID team loses power (and water) for 12 hours during an electrical storm. Photo by Brian Birchler.



Sunday downtime- Belem Carrasco and Brian Birchler discover Dr. Vadjunec's sticker collection.

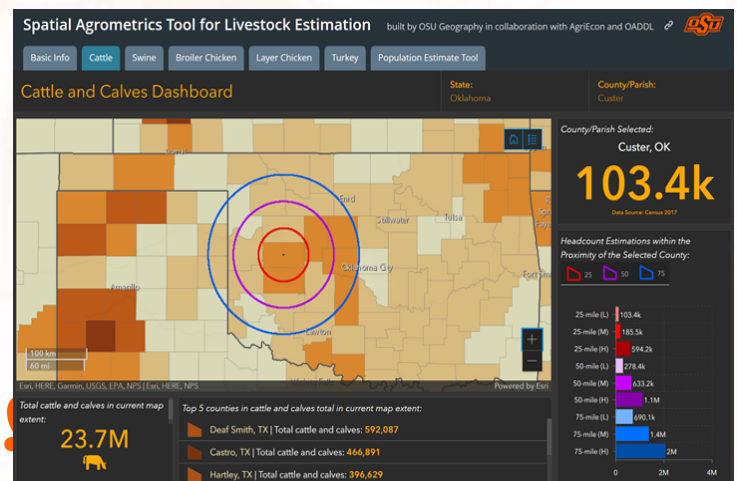


What they mean by no (hu)man's land
Photo by Belem Carrasco.



Dr. Hongbo Yu continued working on the collaborative USDA National Animal Health Laboratory Network Enhancement Grant project with his GRA Stephanie Grace this year. They developed a web-based GIS platform, which allows users to visualize the distribution of several major livestock animals in the US and estimate animal populations within the proximity of a selected point of interest. This platform aims at helping animal health responders develop strategic plans to fight potential animal disease outbreaks. Early this year, Hongbo received another grant from the USDA 2021 Joint Funding Opportunity from the National Animal Health Laboratory Network (NAHLN) and National Animal Disease Preparedness and Response Program (NADPRP) as a team member. In this new project, they will develop a point of care (POC) foot and mouth disease (FMD) diagnostic assay and integrate its geolocation-enabled records to an interactive mapping system in the next two years. The mapping system will have the capability to support wise animal movements decisions during a disease outbreak. Ehsan Foroutan, a PhD student in the department, will work as a GRA to help him complete the tasks in the new project.

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Faculty Updates, continued



Dr. Yuting Zhou taught three courses during the last academic year: Digital Tools for Environmental Exploration, Fundamentals of Geographic Information Systems, and Advanced GIS: Resource Management Applications. Dr. Yuting Zhou continued his role as PI for OklahomaView and Co-Director of the Center for Applications of Remote Sensing (CARS). Dr. Zhou also attended the AmericaView annual meeting in Fort Collins, CO to meet with StateView members from other 40 different states. Dr. Zhou started advising a Ph.D. student funded by the NSF Established Program to Stimulate Competitive Research (EPSCoR) starting in Fall 2021. In collaboration with faculty from the Department of Horticulture and Landscape Architecture Dr. Zhou submitted a proposal to USDA NIFA about detecting pecan nuts with machine learning-driven image analysis to inform load management. Dr. Zhou also published two peer-reviewed articles about alfalfa harvest monitoring and flash drought monitoring.

Cartography Services

By Michael Larson

Cartography Services maintains a rather full schedule. As usual, we have spent most of our time split between several key working areas, including major cartographic projects, as well as map design and compilation work.

Cartography Services continues its traditional role assisting the faculty in the Geography department with their various projects and research. We have completed the preliminary drafts of 101 maps for Dr. Dale Lightfoot's book on Qanats. Additionally, undergraduate students Hadley Brumley and Blaine Mann, worked on various aspects of Dr. Hongbo Yu's NAHLN project, and helped revise a number of maps for the Physical Geography Field Trip Guide with Dr. Carlos Cordova.

Cartography Services is now in its thirteenth year working with Dr. Allen Finchum on the SHPO/OLI project. Our portion of this project, funded by the Oklahoma State Historic Preservation Office, involves data cleaning and updating the Oklahoma Landmark Inventory (OLI) database. Undergraduate students who worked on the project this past year include Matthew Burton, Connor McKeaigg, and Jacob Shepherd. GIS Specialist and staff member, Kellen Bullock, and consulting member, Dr. Matthew Haffner rounds out the project team.



Center for Applications of Remote Sensing (CARS)

By Jing Wang

The Center for Applications of Remote Sensing (CARS) had a busy and exciting year for research, field trips and collaborations both on and off campus.

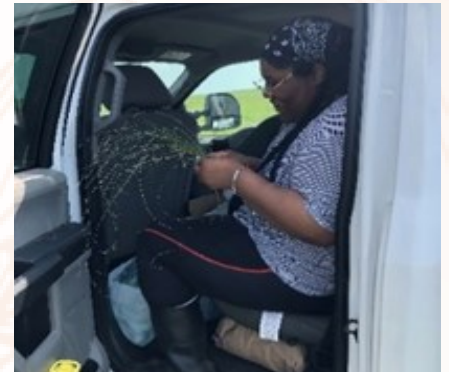
Dr. Hamed Gholizadeh (Co-Director) worked on data collection and analysis for his project at The Nature Conservancy’s Tallgrass Prairie Preserve on the impact of invasive species. A number of students (see photos) participated in field-work.

Wang (Coordinator) focused on using her skills in Unmanned Aerial Systems (UAS) operation and images analysis to monitor crop growth and survey the landscape. She went on many field trips to collect data from alfalfa fields. Jing also participated in many events to increase awareness of CARS, the Geography Department, and knowledge of geo-technology. This included opening the CARS lab to high school and college students, presenting information on the history and applications of remote sensing and UAS, and giving some UAS demos.

Dr. Yuting Zhou (Co-Director) continued his role as PI for OklahomaView. As part of that project, Dr. Zhou and Ms. Jing Wang worked with undergraduate students Chad Brazeel and Chloe Taylor to showcase the beauty of Oklahoma with remote sensing images. Dr. Zhou also bought a DJI M600, a FLIR thermal camera, and a MicaSense RedEdge-MX Dual to enhance UAS.



Team members Dr. Adam Dixon and Kimberly Pan identifying grassland plants.



Team member Makyla Charles preparing fresh leaves for weighing them at the Tallgrass Prairie Preserve.

Resource Management Plan— GIS (RMP-GIS) Project

In 2021 members of the RMP-GIS team traveled to Sequoyah State Park, Keystone Lake, Quartz Mountain, and Osage Hill State Park. We collected data on facilities and trails to update the Oklahoma State Parks database and several Resource Management Plans of the Oklahoma Tourism and Recreation Department. Although we worked long hours, we had time to enjoy the natural, scenic, and historic resources that make Oklahoma Parks so unique and valuable.

Fernanda Ramirez Saenz, Ofuje Amune, Chad Brazeel, and Zac Carnahan at Keystone State Park. Photo by Fernanda Ramirez Saenz.



The mission of the Department of Geography is:

- to provide an exceptional educational experience in a student-centered departmental community that emphasizes the value of lifelong learning, employs engaging instructional activities, and prepares students for careers in an increasingly globalized world;
- to conduct innovative theoretical and applied research that promotes discovery, cultivates interdisciplinary and collaborative partnerships, fosters socioeconomic development, and responds to the needs of society;
- to promote the importance and relevance of geography to the public and to provide geographic expertise to the university, community, and state.

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