DEPARTMENT OF
GEOGRAPHY
College of Arts and Sciences

Geography Newsletter

March 2024

INSIDE:

Geography

Hello Spring!

The redbuds and forsythia are in bloom, and it is nearly time for Spring Break, March Madness, St. Patrick's Day, and the onset of Oklahoma's exciting springtime weather!

Upcoming Events:

- Students' Spring Break, March 18-22
- 3-Minute Thesis Competition, Student Union Theatre, Thurs., April 4
- Geography Colloquium: Brice Zoungrana, Ofuje Amune, & Emmanuel Kumi, Monday, April 8, 3:30, CLB 106
- Physical Geography Field Trips, April 9 & 10
- Annual Meeting of the American Association of Geographers, Honolulu, April 16-20
- Geography Awards Gathering, Tues., April 23
- Finals Week, May 6-10
- Graduate Commencement, Fri., May 10
- Undergraduate Commencement, Sat., May 11

Student Awards and Honors

Undergraduate Geography major Abby Curry won a 2024 SCAUG Scholarship. Abby has worked as a research assistant doing undergraduate research and outreach on the Ogallala Aquifer and farmers' adaptations to drought in the High Plains. Currently a geospatial technician intern, Abby plans to pursue a Master's degree in Geography so she can assist communities navigate the environmental challenges of climate change.

Doctoral student Ehsan Foroutan won a 2024 SCAUG Scholarship. With a bachelor's in surveying engineering from the University of Isfahan and a master's in GIS from the University of Tehran, Ehsan has much expertise as geodatabase administrator and as a licensed land surveyor. His research employs geospatial big data analytics and GeoAI to explore issues of population and environmental health, particularly heat vulnerability amidst climate change. Ehsan's innovative work integrates diverse geospatial data sources with machine learning, and his findings have been featured in Transactions in GIS and the International Journal of Applied Earth Observation and Geoinformation.

Colloquium

ConocoPhillips

2024 Geography Career Spotlight Speaker

Supporting Indigenous Environmental Health Using Geospatial Technologies

Dr. Joe Hoover

On March 4th, ConocoPhillips enabled another outstanding colloquium highlighting career paths in geospatial technology. This year's presenter was Dr. Joe Hoover, Assistant Professor of Environmental Science and Director of the University of Arizona's Indigenous Resilience Center (IRes).

Recent Publications

Foroutan, E., **T. Hu**, F. Zhang, and **H. Yu**. 2024. Assessing heat vulnerability in Philadelphia using geographically weighted principal component analysis (GWPCA): A geospatial big data-driven approach. *International Journal of Applied Earth Observation and Geoinformation* 127:103653.

Gholizadeh, H., **M. N. A. Rakotoarivony**, **K. Hassani**, K. G. Johnson, R. G. Hamilton, S. D. Fuhlendorf, F. D. Schneider, and B. Bachelot. 2024. Advancing our understanding of plant diversity-biological invasion relationships using imaging spectroscopy. *Remote Sensing of Environment* 304:114028.

Hill, R., and J. Fountain. 2023. Wine from Waipara Valley: Expressing sense of place in an emerging New Zealand wine region. In *The Elgar Companion to Valleys: Social Science Perspectives*, eds. L. L. Aguiar, D. Senese, and D. E. French, 143–59. Cheltenham, Glos.: Edward Elgar Publishing Ltd.

Stack, K. and **R. Sheehan.** 2023. Gettysburg tells the story of more than a battle − the military park shows what national 'reconciliation' looked like for decades after the Civil War. *The Conversation*. https://theconversation.com/gettysburg-tells-the-story-of-more-than-a-battle-the-military-park-shows-what-national-reconciliation-looked-like-for-decades-after-the-civil-war-215788.

Wang, P., T. Zhang, and **T. Hu**. 2024. Traffic condition estimation and data quality assessment for signalized road networks using massive vehicle trajectories. *Journal of Ambient Intelligence and Humanized Computing* 15 (1):305–322.

Wang, Y., J. Zheng, T. Schneberk, Y. Ke, A. Chan, **T. Hu**, J. Lam, M. Gutierrez, I. Portillo, D. Wu, C.-H. Chang, Y. Qu, L. Brown, and M. B. Nichol. 2023. What quantifies good primary care in the United States? A review of algorithms and metrics using real-world data. *BMC Primary Care* 24 (1):130.

Wogau K.H., **C.E. Cordova**, L. Morett-Alatorre, and G.A. Ochoa. Reconstruction of fluvio-lacustrine landscapes and settlement history in the Texcoco region, Mexico, using a modern geomorphic analog. *Geoarchaeology* 39(2):168-182.

Conference Presentations

GSA23, Pittsburgh, October 12-16

Dr. Carlos Cordova participated in the annual meeting of the Geological Society of America in Pittsburgh. He organized a session sponsored by the Geoarchaelogical Division of the GSA, which has a number of geography members.

SCAUG 2023 Winter User Group Meeting, Stillwater November 8

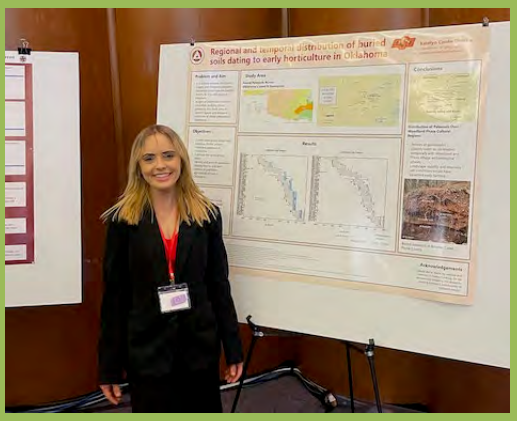
Dr. Hongbo Yu presented "Development of a Web GIS Application for Calculating Livestock Populations in the U.S." at this South-Central Arc Users Group meeting.

Conference Presentations, cont.

AGU23 - San Francisco
December 11-15

Dr. Hamed Gholizadeh, **Wenqi Liu**, **Ny Aina Rakotoarivony**, and **Dr. Yuting Zhou** attended the American Geophysical Union (AGU23) conference in San Francisco in mid-December. AmericaView is a nationwide network for Earth observation education via remote sensing, applied research, workforce development, technology transfer, and community outreach. **Dr. Zhou** serves as PI for OklahomaView, the state's affiliate. AGU attendees were treated to OSU's UAV footage of Black Mesa and Little Sahara on a large video screen.

Oklahoma Archaeology Conference – Norman,
February 29 - March 2



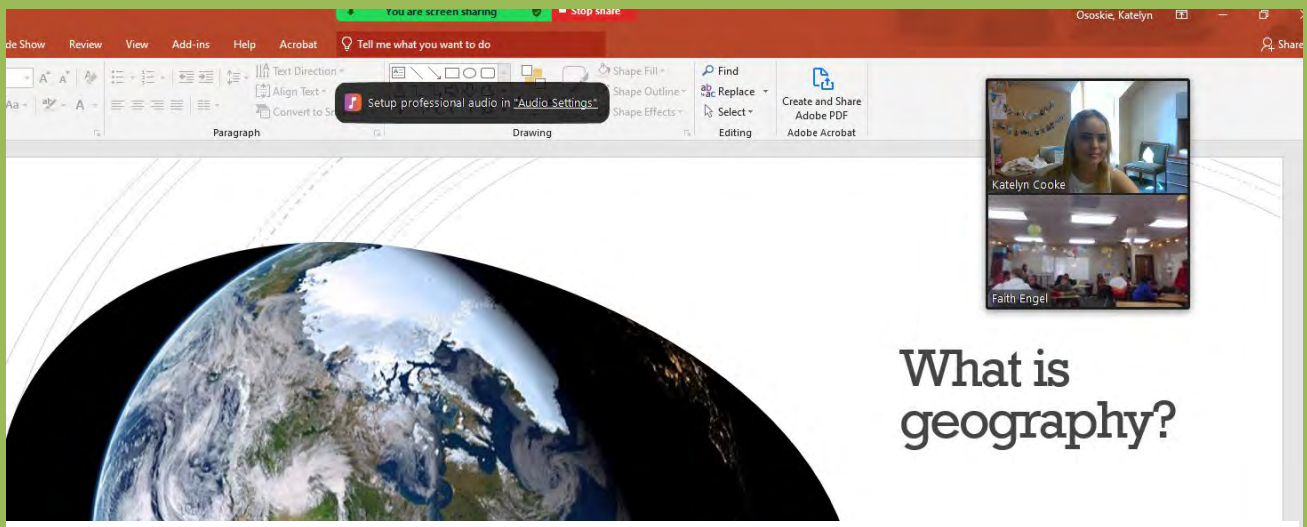
Doctoral student **Katelyn Ososkie** presented on her preliminary dissertation research regarding paleosols in central Oklahoma and how they temporally overlap with early horticulture practices.

GIS Day at the Capitol 2024 - Oklahoma City,
March 6

Sponsored by the Oklahoma Geographic Information Council, the 30th Annual GIS Day at the Capitol was March 6th. It is an opportunity for public and private entities to highlight GIS as a decision-making tool. This year OSU Geography was among 27 exhibitors. Representing the Department were (left to right) **Anthony Lapaglia, Everett Bonine, Abby Curry, Michael Larson, Sadril Khan, and Jean Wang**.

Service and Outreach

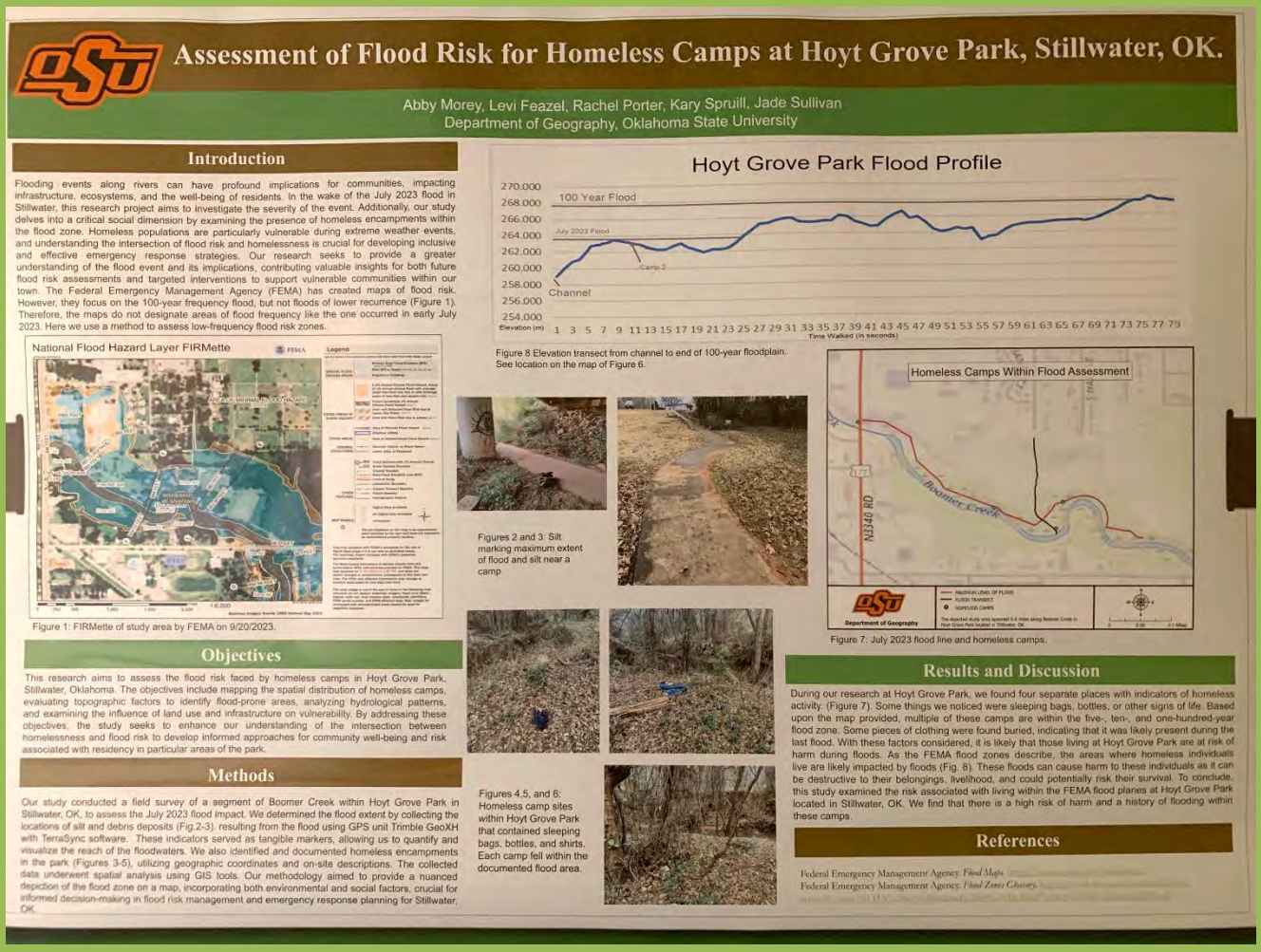
Master's student **Melissa Wynn** was elected to a one-year term as Student Representative to the Southwest Division, American Association of Geographers (SWAAG). Melissa's role will be to voice the interests and concerns of student members, facilitating communication between students and SWAAG leadership, participating in conference planning, and spearheading efforts to engage more students in SWAAG activities. Congratulation, Melissa!



On February 20th the Department received a message from an educator at McLoud Middle School for a request to visit the next day (Career Day) to talk about career opportunities in Geography. Doctoral student **Katelyn Ososkie** immediately stepped up to the challenge and provided several different Zoom presentations to Ms. Engel's Seventh Grade STEM and Geography classes. Katelyn discussed careers and career paths that involve Geography, including explaining the range of questions that are addressed by professional geographers. Ms. Engel's students also described some of their ongoing geography projects, which include coding, GIS, and UAV aviation.

News from around the Department

Dr. Carlos Cordova's **GEOG 4313 Field Techniques and Geodata Collection** ended the Fall semester by producing a poster illustrating their work on a team project assessing the intersection of flood risk and homeless encampments in southeast Stillwater. The poster is now on display on the north end of the main hallway of the Department.



The state-of-the-art stream table is doing its thing in the GEOG 1114 Teaching Lab.

Katelyn Ososkie's students observing fluvial processes. (right) **Sadril Khan's** model of the floodplain of the lower Ganges. (photo by C. Cordova)

News from around the Department

New Addition to the Geography family . . .

PhD candidate Fernanda Ramirez Saenz and husband (and Geography's neighbor in Communication Sciences and Disorders) Dr. Peter Richtsmeier are the proud parents of **Gabriella**.

Congratulations Fernanda and Peter!

Professor Emeritus John Rooney and wife Sandy hosted what turned out to be a **reunion of OSU Geography Department Heads**. Aside from Paul Matthews (1992-1994), every Head dating to 1969 was represented. They are, from left to right, **Richard Hecock** (1979-1989), **John Rooney**, (1969-1979 & 1989-92), **Tom Wikle** (1994-2000), **Alyson Greiner** (2018-23), **Dale Lightfoot** (2000-2017), and **Jon Comer** (2023-present).

News from around the Department

(TEN PIN) BOWLING NIGHT

Frontier Lanes welcomed an inaugural group of geography bowlers on Thursday, February 29th. Interim Department Head **Jon Comer** quantified the rest of us. There will be a rematch, hopefully with more geographers involved - it was a great time!

*Thank you especially to **Rory A. D. Hill** for organizing this outing and introducing us all to Ten Pin Bowling! ☺*

(left to right) Jon Comer, Saber Brasher, Rory Hill, Rebecca Sheehan, Brad Bays, Erik Anderson, Brice Zoungrana, and Madeleine Griffith

In Memoriam

Jerry Croft (1939-2023)

Dr. Jerry Croft, Professor Emeritus of Geography at Oklahoma State University, passed away on November 19, 2023. Born in Anthony, Kansas in 1939, he was the first in his family to attend college. He obtained his BA in Geography from Oklahoma State University in 1962, followed by a master's degree at Kansas State University and an Ed.D. from the University of Tulsa.

During his long career, he inspired countless students with his passion for geography. He specialized in cultural geography, contributing to the discipline through innovative teaching strategies and his involvement in developing the national geography standards. His thematic teaching approach and incorporation of fine arts into geographic education allowed him to tell stories of far away places and peoples in a uniquely engaging way.

A visiting professor and scholar-in-residence at various institutions, Jerry's commitment to education was unwavering, even extending into his retirement. He established the Jerry Croft and Family Award in Geography Education at OSU, supporting future generations of geographers.

Remembered for his creativity, warmth, and humor, Jerry's love for places was rooted in his childhood experiences along Bluff Creek. This connection to the land was something he cherished and adeptly wove into his lifelong work and teachings. He passed away peacefully, surrounded by his loving family, leaving behind a legacy of academic excellence and a passion for the expansive discipline of geography.

In Memoriam

Fred Shelley (1952-2023)

The Department of Geography at Oklahoma State University mourns the loss of Dr. Fred Shelley, a distinguished colleague and former Chair of the Department of Geography and Environmental Sustainability at the University of Oklahoma. Fred's remarkable career in geography, highlighted by his fervent passion for teaching and research, left an indelible mark on all who had the pleasure of knowing him. His educational journey, which led him from a B.A. in Philosophy to a Ph.D. in Geography, underscores a relentless pursuit of knowledge that inspired both colleagues and students alike. Fred was not just a prolific scholar; he was a beacon of kindness and humor, qualities that endeared him to many within our community. Although he was not directly affiliated with Oklahoma State University, his contributions to the field and his unwavering support for geographical education bridged institutional divides, making him a beloved figure in our academic family. Fred's legacy of excellence and compassion remains a source of inspiration for us all, as we continue to cherish the memory of his outstanding life and contributions. Fred's CV: http://spider.ags.ou.edu/~fshelley/