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Department of Geography

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Geography Newsletter

Department of Geography South Dakota State University

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February 2016 Volume 14

SDSU Geography Newsletter

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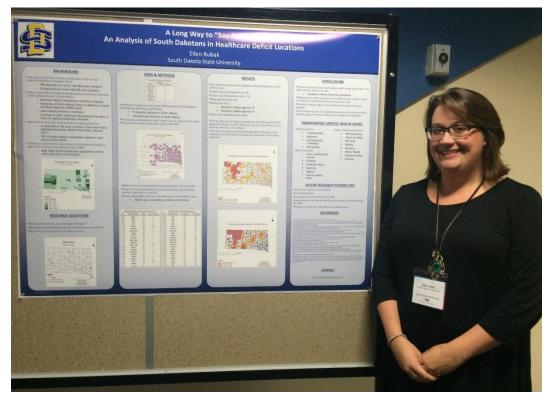
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National GIS Day and Geography Awareness Week. Geography and GIS students present professional posters at EROS, November 18, 2016.

Award Winner



Graduate Student Ellen Bubak, a second year master's student, won first place in the student poster competition at the annual meeting of the Great Plains-Rocky Mountain (GPRM) division of the American Association of Geographers (AAG) in Kearney, Nebraska, October 2-3, 2015. Ellen's poster, "A Long Way to 'Say Aah' - An Analysis of South Dakotans in Healthcare Deficit Locations," used ideas from professor Watrel's Great Plains seminar and Dr. Lin's GIS class to determine where healthcare in South Dakota is least accessible.

Head's Column:



I am now well into my seventh year as Head of the Department of Geography. We welcomed many new students this year, and many of our more seasoned students graduated and began pursuing their careers. At the same time, we continue to have successes and experience change as we develop. As part of our change, we conducted two new faculty searches in 2015. Joining us in Fall 2016 are Dr. Yanan ("Nancy") Li, whose interests are dendrochronology and glacial geomorphology. Also joining us is Dr. Jamie Spinney, whose interests are urban geography, planning, and sustainability. We look forward to working with them and learning more about them as they contribute to and enhance our department and our programs.

Further change came with the approval of our online Geography major by the Board of Regents. It officially began Fall semester 2015. One of our other initiatives was the development of a Community and Regional Planning major.

Continuing with our past activities, we attended the annual meeting of the American Association of Geographers (AAG) in March in Chicago and also attended the Great Plains-Rocky Mountain (GPRM) regional division meeting in Kearney, Nebraska in October. At both conferences, faculty members and students presented

papers and posters (see pages 1, 6 & 10). Department members also travelled to EROS Data Center where students presented professional posters on GIS Day (November 18) (see page 1). We continued our collaboration with the South Dakota Geographic Alliance (SDGA). Part of our work together included teaching at St. Francis Indian School on the Rosebud Reservation (page 5) and numerous Geography Awareness Week Activities (GAW) (page 7). One of these activities was the GAW talks. Our speaker in 2015 was William L. Graf, a nationally known fluvial geomorphologist, a University Foundation Distinguished Professor Emeritus at the University of South Carolina, and a Past President of the American Association of Geographers (AAG). He presented two illuminating talks, one on dams and hydropower and the other on the Florida Everglades.

International travel was on our agenda in 2015 as well. Dr. Yan Lin attended the International Conference on Geoinformatics in Wuhan, China (see page 3). Jeff Irwin (page 18) joined Dr. João Santos (page 21) for fieldwork in northern Portugal May (page 3). Afterwards, Jeff and Cassandra Stangeland (page 20) traveled to Romania to attend a conference (page 4). Joe Donahoe (page 18) completed a field excursion in Cuba (page 4).

Much of the credit for the strength of our programs goes to our Graduate Teaching Assistants (GTAs), who teach the laboratory sections for our courses. The GTAs play an important role in getting undergraduates students enthusiastic about Geography. Our GTAs in 2015 were Sefa Adekpui, Rajibul Hasan Al Mamun, Austin Brynjulson, Ellen Bubak, Joe Donahoe, Danielle Guthrie, Mika Hasanen, Jeff Irwin, Alexander Ketchpaw, Confiance Mfuka, Sujan Parajuli, Brad Richardson, Annelieke Sinnema, Dinesh Shrestha, Cassandra Stangeland, and Byron Will-Noel. We appreciate all their hard work!

We greatly value our connections with our alumni and acknowledge their contributions. In 2015, we chose Julie Parker for the *Graduate Alumni Award* and Patrick Danielson for the *Undergraduate Alumni Award* (page 14). Thanks to Scott Gordon who sent us an update on his activities. You can read about them on page 9. Many of our alumni work at EROS (Earth Resources Observation Science) Data Center. They are on pages 16 and 17 where you can see them and learn about their activities. For any alumni reading this newsletter, please tell us what you have been doing. We will be happy to include your information in future newsletters. Thanks also to all you who have donated money to the Department and its mission. No donation is too small and all donations are put to work educating geography students and spreading the word of geography. Also, check out our Facebook page: www.facebook.com/GeographySDState. It is a great way to stay in touch with us.

We also greatly value the opportunities to work with other people and appreciate how others enhance our programs and the experiences of our students. Bill Ross is one such example. He opened his farm to our faculty and students for learning experiences. In appreciation, we selected him for our *Friend of Geography* award in 2015 (see page 16).

Finally, we had a very successful South Dakota State Geography Convention (March 19th-20th) in 2015. It was the 46th one. A number of distinguished speakers presented their research on a range of interesting topics (pages 11-13). The president of the American Association of Geographers (AAG), Mona Domosh, gave the banquet presentation. It was great seeing those who attended. We look forward to seeing you there at future Conventions!



Dr. Yan Lin Visits China

Over the summer, Dr. Yan Lin visited Wuhan University and Central South University in China. She attended the International Conference on Geoinformatics (June 19-21) held in Wuhan and presented a paper entitled "Geographic Access to Healthcare among American Indian (AI) Population - A New Approach to Understand Cancer Disparity Burdens among Als." Proceedings of 23rd International Conference on Geoinformatics. Wuhan, China, June 19-21, 2015.





Field Research in Portugal

Jeff Irwin, M.S. student in Geography, traveled to the Gerês Mountains of northwestern Portugal and Spain in the summer of 2015 to study the glaciated landscapes with his thesis advisor, Dr. Joao Santos. While there, Jeff also assisted in glacial geomorphic research in the Cantabrian Mountains of Spain with researchers from the University of León. As a follow-up to the summer fieldwork, Jeff traveled to San Jose State University in California in December 2015 to conduct laboratory work and analysis on the field samples from the Gerês Mountains with Dr. Santos. Jeff plans to present some of the research from the Gerês Mountains at the annual of the American Association of Geographers (AAG).





Source: https://commons.wikimedia.org/wiki/Category:Travel_maps_of_Portugal#/media/File:Portugal_regions_travel_map_EN.png

The international research team sitting in front of a glacial tarn in the Cantabrian Mountains. From left to right: Dr. Javier Santos-Gonzalez, Dr. João Santos, Jeff Irwin, Dr. José Redondo-Vega, Dr. Blanca González-Gutiérrez.

Return to Romania

Geography students Jeff Irwin and Cassandra Stangeland attended the 10th annual International Symposium on *Present Environment and Sustainable Development* at the University of Alexandru Ioan Cuza in Iasi, Romania, June 5-7, 2015. Jeff and Cassandra also participated in the associated field trip, which included excursions to Neamţ Fortress, the Neamţ forest, Vanatori Neamţ Natural Park, the Sturza Castle, the "Cuza" Palace, the Ceahlau National Park, the Bicaz Dam and Iake, along with the Bicaz River floodplain, not to mention several monasteries of significant historical importance. Jeff and Cassandra were able to interact with faculty and students from the university throughout the conference and field trip. This opportunity enabled both students to experience Romanian food, culture, history, and landscapes firsthand. Jeff and Cassandra then traveled to Southern Carpathians, where they ventured to the dreaded castle of Vlad Tepeş in Bran. They also explored the medieval city of Brasov, where they scaled a mountain and experienced the local culture firsthand.





Bran Castle



The Place of Culture in Iaşi.



Bicaz Reservoir in the Carpathian Mountains.

Excursion in Cuba

During Spring Break, Joseph Donahoe, master's student in Geography, traveled to the island of Cuba as part of a joint university study abroad program with Oklahoma State University's Department of Geography. The main purpose of the trip was to conduct cultural studies on the people of Cuba. The trip included five days in the city of Havana, in the heart of Cuba, and three days in the remote town of Viñales, which is in the western region of the country. While in Havana, the group toured many different locations, including an organic farm that supplies Havana with fresh fruits and vegetables. The group also visited numerous landmarks in the city, including the capitol building where the Cuban version of the House of Representatives meets enacted laws and policies for the country. The group also met with religious leaders from the Santeria, which is the Afro-Cuban religion that formed out of the slave trade that passed through Cuba. Also, what is a trip to Cuba without a tour of the Cohiba cigar rolling factory? At the factory, hundreds of Cubans sat at stations rolling cigars while listening to a man reading the state-run newspaper on a megaphone. As the group ventured out of Viñales, they visited an environmental conservancy, where protected lands have been replanted from the deforestation that resulted



Joe standing in front of Jose-Marti International Airport. Havana, Cuba.

from the economic hardships caused by the fall of the Soviet Union. This conservancy, however, is different than most in the United States. Its land also serves as a small farming community whose mission is to care for the land and nurture it back to full strength. After visiting Viñhales, the group traveled back to Havana for its flight. The trip was an extraordinary opportunity to see the untouched country of Cuba still stuck in the 1950s.

Author: Joseph Donahoe

Students' Visit Jerry Wilson's Eco-Friendly Solar House and Property

On their trip to Kearney, Nebraska for the annual Great Plains-Rocky Mountain Region divisional meeting of the AAG on October 2-3, Dr. Darrell Napton and several students visited the home of Jerry and Norma Wilson, retired English professors. The tour began with the paths near the house.

On this portion of the tour, Drs. Wilson pointed out a variety of plants that are native to South Dakota. The house was designed and built by the Wilsons to be as energy efficient as To accomplish this, the possible. house was built into the side of a south facing hill and with large windows all along the front of the house. These windows are used to provide most of the heating in the winter through solar radiation. During the years that Jerry and Norma have lived in the house, their energy savings have been equivalent to the entire cost of constructing the house.

At the conclusion of the house tour, Jerry then led the group on a nature hike on another piece of the Wilson's property. The Wilson's restored prairie had a variety of native plants as well as several invasive species that



The oldest house in Clay County (1800s). From left to right: Mika Hasanen, Sefa Adekpui, Jeff Irwin, Dr. Darrell Napton, Cassandra Stangeland, and Ellen Bubak.

the Wilsons are trying to eradicate. The tour began in a grassland setting, and progressed into a native forest landscape. The path through the woods took the group to the oldest house in Clay County, a two-story log building maintained by the Wilsons that was built in the 1800s. Once the tour of the log building concluded, the group returned to Dr. Wilson's house

where they thanked their hosts and continued to Kearney.

If you wish to learn more about the Wilson's eco-friendly home and their journey to restore the native plants on their property, look for Dr. Wilson's book, Waiting for Coyote's Call: An Eco-Memoir from the Missouri River Bluff.

Author: Alexander Ketchpaw

GIS at St. Francis Indian School

While one group traveled to Jerry Wilson's eco-friendly solar house on their way to the Great Plains-Rocky Mountain meeting, another group visited the St. Francis Indian School on the Rosebud Reservation. This group consisted of Dr. George White, Dr. Robert Watrel, Sam Cooper, Sujan Parajuli, Dinesh Shrestha, and Joseph Schmunk. While at St. Francis Indian School, they visited the 7th grade classes of Rhonda Cherry and Roger Wonneberg and conducted a GIS workshop. Through the use of GIS, students followed settlement movements in North America from the 1600s to the 1860s. In doing



George White explains the GIS activity.

so, they learned how physical geography influenced migration routes and shaped settlement patterns. For most students, this was their first encounter with GIS. This visit was in cooperation with the South Dakota Geographic Alliance (SDGA), which also provided a classroom set of student atlases for each teacher.



Joseph Schmunk helps a 7th grade student learn GIS.

Great Plains-Rocky Mountain Division Meeting of the AAG

The 2015 annual meeting of the Great Plains-Rocky Mountain Regional Division was held at the University of Nebraska-Kearney on October 2-3. Three professors from the Geography Department attended: Dr. Napton, Dr. Watrel, and Dr. White. They were joined by 10 students: Sefa Adekpui, Ellen Bubak, Sam Cooper, Mika Hasanen, Jeff Irwin, Alex Ketchpaw, Sujan Parajuli, Dinesh Shrestha, Joseph Schmunk, and Cassandra Stangeland.

Dr. Watrel co-presented a paper entitled "Regionalism and Realignments of the Republican Electorate in Presidential Elections from 1872 to 2012." Dr. White served on a panel entitled "Geographic Alliance Activities in the GPRM Region." Cassandra Stangeland presented a paper entitled "Refugee Resettlement in the Great Plains: A Closer Look at Refugees in South Dakota." Ellen Bubak's poster, "An analysis of South Dakotans in healthcare deficit locations," won the best poster award (see Page 1).

The Department also fielded a GeoBowl team to represent SDSU. Jeff Irwin placed among the highest-scoring students. He received financial support from the region to represent SDSU and the GRPM region at the AAG National Geography Bowl in San Francisco.



SDSU's GeoBowl Team: Left to right: Sam Cooper, Ellen Bubak, Mika Hasanen, Joseph Schmunk, Alexander Ketchpaw, and Jeff Irwin.

Kearney Field Excursion

Darrell Napton took eight students on a one-day field excursion from Kearney, Nebraska, where the Great Plains-Rocky Mountains regional AAG meeting was held. A major highlight of the trip included the Union Pacific Baily Yard in North Platte, the world's largest railroad classification yard. More than 150 trains and more than 15,000 rail cars move through on 200 separate tracks, and the facility's two humps sort more than 3,000 rail cars each day. Later the group drove through a portion of the Nebraska Sand Hills where they observed the homecoming parade in Tyron, classic Sand Hills ranching landscapes, and land management issues associated with Sand Hills ranching. The group had lunch in Big Red's café, a quintessential Sand Hills eatery, before continuing to the Bessey Ranger District of the Nebraska National Forest, which is the largest hand-planted forest in North America. The day ended in the Central Nebraska Loess Plains with a focus on land management issues associated with farming in loess hills and plains.

Author: Darrell Napton

Gamma Theta Upsilon (GTU): Delta Zeta Chapter (DZ)



Joseph Schmunk, Byron Will-Noel, Mika Hasanen, Ellen Bubak, and Joel Barker are inducted into the Delta Zeta Chapter of Gamma Theta Upsilon honorary society by Dr. Darrell Napton.

Geography Awareness Week (GAW) Speaker

William L. Graf is a nationally known fluvial geomorphologist and the 2015 Geography Awareness Week speaker. He is a University Foundation Distinguished Professor Emeritus at the University of South Carolina and a Past President of the American Association of Geographers (AAG). He recently chaired the Geographical Sciences Committee of the National Academies of Science, where he is a National Associate. He was elected Fellow of the American Association for the Advancement of Science in recognition of his science and policy contributions for rivers. Professor Graf gave two public talks. In the first talk "The Life and Times of the Florida Everglades", Prof. Graf concentrated on how science, policy, politics, and economic development interacted to degrade and shrink the Everglades of Florida. Moreover, he discussed



Left to right: Kaitlyn Abrahamson, Alexander Ketchpaw, **William L. Graf**, Jeff Irwin, Cassandra Stangeland, and Ellen Bubak.

the basis for implementing an ongoing Comprehensive Everglades Restoration Plan (CERP), the goals for this program, and accomplishments so far. In the second presentation entitled "Dams and Hydropower, Rivers and Habitats", Prof. Graf's speech focused on the American experience in dealing with four specific topics: the geography and history of American hydropower dams; the structure and operation of such dams; the downstream hydrologic, geomorphic, and ecosystem effects of these dams; and the alternatives available for dam and river management to mitigate downstream ecosystem effects. He also reviewed the complex interactions among dams, hydropower, and rivers. Professor Graf took time to meet individually with students and faculty members and he gave a seminar that explained to students how to write successful grant proposals and how to professionally and successfully find a job. The talks were sponsored by the Department of Geography, The South Dakota Geographic Alliance (SDGA), and the Virginia and J. Edward Holtry Visiting Scientist Program.

Authors: Sujan Parajuli & Darrell Napton

SD Geographic Alliance Promotes Geography Awareness Week



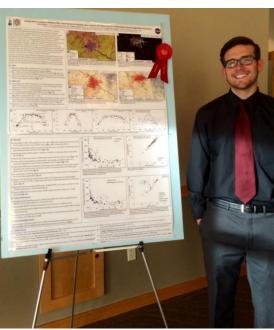
South Dakota Geographic Alliance (SDGA) members Emily White (Alliance Coordinator) (center left) and Kim McCullough (center right) conduct a geography workshop and award atlases to Ms. Albert's 1st Grade class at Hillcrest Elementary School in Brookings, SD.

Cole Krehbiel Wins Prestigious Award

Cole Krehbiel, master's student in Geography, attended the 2015 Joint Urban Remote Sensing Event (JURSE), held in Lausanne, Switzerland from March 30 to April 1. In a field of mostly Ph.D. students, Cole won 3rd place in the student competition for the Best Paper Prize for his work: "Using Webenabled Landsat Data time series to analyze the impacts of urban areas on remotely sensed vegetation dynamics."







Delora Bennett: Employee of the Month

Congratulations to Delora Bennett, department secretary, who was selected the Civil Service Employee of the Month for November 2015.









President Chicoine presents the certificate to Delora.

Graduate Student and Alumnae Add Depth to Class

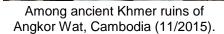
Darrell Napton's Environmental Geography, which focuses upon sustainability issues, was enhanced by the contributions to two guest geographers. Ross Evelsizer, a current graduate student, presented "Sustainability and Resilience Planning for a Large Scale Watershed" based upon the Turkey River Watershed Flood Reduction Plan that Ross co-wrote for the Northeast Iowa Resource Conservation and Development district (http://northeastiowarcd.org/contact/). Recent graduate, Suzanne Cotillon presented "Impacts of Land Cover Changes on Ecosystem Services Delivery in the Black Hills Ecoregion from 1950 to 2010," and discussed her EROS/USAID work on land cover change and restoration in West Africa.

Author: Darrell Napton

Alumni Spotlight

Scott E. Gordon received his B.S. with a Geography major in 1992 and then completed a M.S. in Geography in 1995. He works at the USDA-NRCS (United States Department of Agriculture-Natural Resources Conservation Service) Virginia State Office on the Ecological Sciences Team as a GIS Specialist/Geodata Administrator and Customer Service Toolkit (CST) Coordinator in support of Soil and Water Conservation throughout the commonwealth. He also serves as President of the Virginia Chapter of the Soil and Water Conservation Society. Scott loves to travel and is interested in Southeast Asia, especially Thailand. Sawadee Krup!







On a 4-week trip to Thailand, spending much of the time exploring the rubber-producing province of Nakhon Si Thammarat while visiting friends (2013).

What Inspires Donors to Give to SDSU?



Have you ever read an article about someone who made a charitable gift that made you wonder why that person did it? Do you wonder why someone might decide to give to a charity rather than keep it and pass it on to family? Often, we learn, it is because they have been inspired by someone else who they watched give to others. For the Geography Department, we encourage you to consider how you might support our students and our efforts on their behalf.

Every day, alumni and friends of South Dakota State University make a difference for students on campus. Some help support facilities in which students learn and faculty teach. Others help defray the cost of attending school with support for scholarships. Giving to SDSU is a personal decision. But most of our donors have been inspired by someone in their life who showed them how to be generous.

For some donors, they saw their grandparents give. Others received scholarships while attending SDSU and have decided to pay it back... or as some say, "Pay it Forward." One generous friend of SDSU shared that he learned from his father who said, "I do what I can, and if others do

what they can, we will all make a difference."

For many alumni, the decision to give comes when their Caller ID shows that someone is calling from South Dakota State University or the SDSU Foundation. Do you pick up the phone and visit with the student who is calling? Or, do you "let it go to voicemail." I encourage you, the next time your phone rings, take that call and have a conversation with one of the current students. If you would like to have a conversation about making a gift which might be more than what you might give over the phone to a student caller, or if you would like to fund the gift in a way which could have tax benefits, I am happy to assist you. Call me on my mobile, 605-695-7378, or email me at rina.reynolds@sdsufoundation.org.

111th Annual Meeting of the AAG in Chicago, April 21-25, 2015



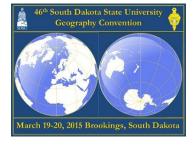


L-R: Garth Wadsworth, Ellen Bubak, Cassandra Stangeland, Bob Watrel, Yan Lin, George White, Crysta Dendinger. Photographer: Darrell Napton

Presenter	Title	
Joshua E Bucher	Tribute to John Fraser Hart.	
Suzanne Cotillon & Darrell Napton	Impacts of Land Cover Changes on Ecosystem Services Delivery in the Black Hills: Ecoregion 1950-2010.	
Janet Gritzner	Onagers and Ostriches: Biblical Fauna Reintroductions to the Negev.	
Danielle Guthrie	Geopolitical Ripples: Impacts and Repercussions of the Ukrainian Crisis in Relation to Romania.	
Hilary Hungerford	A Situated Urban Political Ecology of the Niamey Urban Forest.	
Hilary Hungerford	Geography Study Abroad Programs: Field Experiences from Africa 1. (Panel)	
Trisha Jackson, Lilian Rebellato, & Denise Pahl Schaan,	Geochemical Imprints of Society in the Brazilian Amazon.	
Yan Lin & Hilary Hungerford	A Multilevel Approach to Understand and Reduce Cancer Disparities in South Dakota.	
John Clark Archer, Robert Watrel, Stanley D Brunn, & Gerald R. Webster	Quantitatively Delineating the Bible Belt, 1990-2010.	
John Clark Archer, Robert Watrel, & Fred M. Shelley	Critical Realignments in Republican Presidential Elections: Trends across Time and Space from 1872 to 2012.	
Robert Watrel	The 2014 Elections and 2016 Elections in the United States. (panel)	
Lingling Liu & Xiaoyang Zhang	Interannual Variations of Land Surface Phenology in the Tibetan Plateau: A Comparison of Methods and Sources of Uncertainty.	
Xiaoyang Zhang, Dong Yan, & Lingling Liu	Long-term Land Surface Phenology: Climatology, Trend, Variability, and Climate Impacts.	

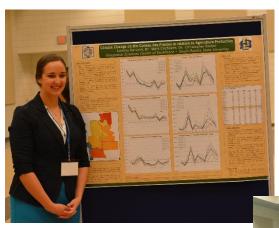
46nd Annual South Dakota State Geography Convention 2015

Held on March 19th and 20th, 2015, the Convention featured a number of distinguished speakers from around the country.



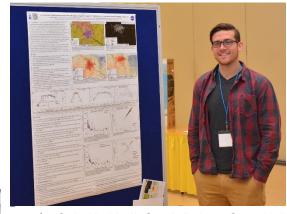
Speaker	Affiliation	Presentation Title
Dawn Drake	Missouri Western	Challenges and Opportunities for Agriculture in the Rural-Urban Fringe
David Wishart	University of Nebraska- Lincoln	Writing a Short Book on Plains Indians: A Geographic Approach
Gerald Webster	University of Wyoming	The Sanctification of the Washita Massacre Site
Kevin Gallo	NOAA/NESDIS	Urban Climates: What You Don't Know Could Hurt You
Donald Kress	City of Williston Planning Department	Growth Through Annexation in Williston, North DakotaMotivations and Develop- ment Outcomes
Xioayang Zhang	South Dakota State University	Satellite Monitoring of the Green Wave and Brown Wave on the Earth's Land Surface in Response to Global Climate Change
Mona Domosh	Dartmouth College	From the U.S. South to the Global South: Practicing Development at Home

POSTER AWARDS at the Convention



1st – Loretta Bartosh, South Dakota State University. *Climate Change on* the Coteau des Prairies in Relation to Agriculture Production.

The McGraw-Hill Publishers Award



2nd – Cole Krehbeil, South Dakota State University. *Using Web-enabled Landsat Data Time Series to Analyze the Impacts of Urban Areas on Remotely Sensed Vegetation Dynamics.*

Wiley Publishers Award

3rd – Brock Couch, Missouri Western State University. *Using GIS to Determine the Success of Amphibian Reproduction in Man-Made Vernal Pools.* The Geography Club Award

46th Annual South Dakota State Geography Convention & Banquet 2015





Byron Will-Noel presents Convention Speaker Xiaoyang Zhang (SDSU) with plaque.



Convention Speaker Kevin Gallo (NOAA/NESDIS) receives plaque from Garth Wadsworth.



Convention Speaker Dawn Drake (Missouri Western) receives plaque from Austin Brynjulson.



Crysta Dendinger presents Convention Speaker Gerald Webster (University of Wyoming).



Convention Speaker
David Wishart
(University of Nebraska-Lincoln)



Thomas Henebry presents Convention Speaker Donald Kress (City of Williston, Planning Department) with plaque.





Danielle Gutherie presents Banquet Speaker Mona Domosh (Dartmouth College & AAG President) with plaque.

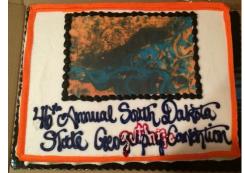
Department Head George White presents Hilary Hungerford with prize from the South Dakota Geographic Alliance (SDGA).













From left to right: Bruce Millett (Geography Club Advisor), Mona Domosh (AAG President), Mika Hasanen, Byron Will-Noel, George White, Kyle Vande Weerd, Garth Wadsworth (Club Secretary), Danielle Guthrie (Club President), Cassandra Stangeland; kneeling: Thomas Braga-Henebry (Club Treasurer), Crysta Dendinger (Club Vice-President), Austin Brynjulson, Jeff Irwin and Wyatt Robbins.

Julie Parker: Graduate Alumni Award for 2015

Julie A. Parker is currently the Director of Energy Solutions at Digital Globe. She attended SDSU from 1993-1995, completing her M.S. degree in 1995. She came from Florence, South Carolina with the intent to continue her interest in Cultural Geography. She pursued this goal completing an intriguing thesis on land tenure on St. Helena Island, South Carolina from 1860 to 1995. But the story is not cultural geography though admittedly a lifelong love, but what she discovered herenew at the time was Geographic Information Systems (GIS).

Julie receives this award for what she has accomplished in the private, energy sector with knowledge and skills acquired at SDSU in geography and spatial technologies. Beyond class work, she gained practical experience in GIS working for the City of Sioux Falls. That led to employment at the City of Norman Oklahoma as a GIS analyst and a Graduate assistantship in GIS with May Wuan in the Department of Geography at University of Oklahoma.

For several years, she worked for the Oklahoma Geographic Alliance, training teachers in spatial technologies. She promoted active learning and worked on research with Dee Fink,



noted Geographic educator "about understanding how people learn." Julie originated the career track program at University of Oklahoma for training state employees in GIS/GPS technologies. Shortly after she became a training specialist for an architectural and engineering firm, whose clients included Chesapeake Energy, the second largest natural gas producer in the US.

Julie was recruited by Chesapeake Energy as they were just beginning see the possibilities of GIS in the industry. She started as the manager of the GIS division with four employees and was later promoted to director with 70 employees with a greatly expanded operation. She introduced remote sensing data and analytics to Chesapeake's daily operations.

Julie wanted to make sure that people understood that "the key with the energy industry is that they speak in the language of maps." This is fertile ground for geographers where they'll find kindred spirits.

More recently Julie was recruited as Vice President of Energy Solutions, at Spatial Energy, Inc, Boulder, Co. This company provides remote sensing solutions for energy companies. Within 90 days, Spatial Energy, Inc. was acquired by Digital Globe, and Julie became Director of Energy Solutions. Within the last year, she has flown over 200,000 miles working with clients in the Netherlands, Oman, China, and the United Kingdom.

When asked if she had stock options, she said yes indeed!

Author: Janet Gritzner

Patrick Danielson: *Undergraduate Alumni Award* for 2015

Patrick Danielson received the Out-Undergraduate Alumni standing award. Patrick earned his B.S. in Geography in 2000. B.S. in Geographic Information Systems in 2002, and his M.S. in Geography in 2010. Patrick has spent most of his professional career at EROS where he has worked as a geomatic specialist, software engineer, and is now a senior scientist helping plan the mapping strategy for the National Land Cover Database. Patrick has regularly presented posters and papers at the annual meeting of the American Association of Geographers (AAG), and he is author or coauthor of several refereed publications and abstracts.

Patrick has supported the Department of Geography throughout his career. He helped Professor Donald Berg prepare the Department's first internet class, Environmental Disasters

and Human Hazards, and when Professor Berg retired, Patrick assumed responsibility for teaching the class. More recently Patrick has worked with Dr. White to create a new class, Geography Technologies for the 21st Century. Throughout his career, Patrick has worked tirelessly promoting geography, and specifically geography at SDSU. He has worked to recruit students, volunteered to help the department, and offered suggestions about how the department can grow and improve. Patrick's efforts have made the geography department stronger and have provided valuable ties with EROS. For these reasons, the Department of Geography selected Patrick Danielson as the 2015 Outstanding Undergraduate alumnus.



Patrick receives award from Dr. Darrell Napton.

Author: Dr. Darrell Napton

Friend of Geography 2015: Bill Ross

The Department of Geography presented Bill Ross, local farmer and entrepreneur, with the *Friend of Geography* award for 2015 for his support of our teaching and research activities. Mr. Ross led student tours of his farm, co-organized "how-to" workshops for the community, and provided access to his farm for Geography faculty and USGS EROS scientists for research and training activities. Mr. Ross worked closely with Dr. Jackson and her student workers Confiance Mfuka and Kaitlyn Abrahamson in planning and carrying out a SD Board of Regents-funded project, "Farming with Biochar".

Raised on a beautiful ranch in Wyoming, in his youth Mr. Ross was known as the area's "pumpkin farmer". He met his wife Julie at South Dakota State University and they married in 1977. The Ross's worked in ministry for many years domestically and in pastoral care and training internationally including Central Asia, Central America, and Africa, some of which continues today. Today their four grown sons and daughter-in-law occasionally can be seen helping with their 40-acre farming operation, *Good Roots Farm and Gardens*, where they are "developing the farm into a sustainable learning farm for local food production, events, and agri-tourism."



Bill Ross receives the Friend of Geography Award from Trish Jackson.

Young Professional Award 2015: Austin Brynjulson



Austin Brynjulson receives the Young Professional Award from Darrell Napton.

The Young Professional Award is given to students who exhibit professional behavior by making voluntary contributions to the department and the geography profession. Austin Brynjulson, a graduate student and teaching assistant, exemplified professionalism in all of his activities. Austin consistently volunteered and did extra work for his students, the Geography Club, and the department. For example, he used his considerable artistic skills to paint a canvass that now represents the Geography Club in the student union. Within the department, Austin always volunteers to help whether the need is to make a map or move furniture. Austin's sense of humor invigorated the department and he co-created a geography jokes poster for the convention. Austin represented the discipline and the department professionally in all facets of his life including his work for the City of Sioux Falls and his participation in local, regional, and national geography meetings. His efforts have made the Geography Department better, and we are pleased to recognize Austin's work with the Young Professional Award. Author: Darrell Napton

SDSU Geographers at EROS

South Dakota State University (SDSU) and the United States Geological Survey's Earth Resources Observation and Sciences (EROS) Center have formed a partnership to provide opportunities for professional development and collaborative research in the fields of geography and remote sensing. As a result, many SDSU Geography Alumni pursue careers at EROS.

To provide some insight on what can be accomplished with a geography degree from SDSU, we have asked EROS SDSU Geography Alumni to share some of their recent endeavors.

Tom Loveland has been haunting the halls of the EROS Center since 1979. His technical skills have deteriorated, but like many wily veterans in their twilight years, he compensates by focusing on scientifically relevant geographic research. His research continues to investigate the geography of land change, and he is increasingly interested in the forcings and feedbacks between land use and weather and climate. Tom serves as the chief scientist for the EROS Center. He advises the EROS director on strategic science directions and opportunities for improving EROS science and applications impacts. For example, he is providing leadership for LCMAP (Land Change Monitoring, Assessment, and Projection), an EROS-wide initiative to improve the capacity to produce data, information, and knowledge on past, present, and future land change. He also chairs the USGS-NASA Landsat Science Team, which is now addressing the capabilities of the next two missions, Landsat 9 and 10.



Stefanie Bohms is a GIS Scientist with the USGS EROS Center's Famine Early Warning Systems Network (FEWS NET) GIS Development and Analysis team where she applies GIS and remote sensing technology for collecting/ processing data as well as designing and developing scientific production flows for various agro-hydrologic models, including SSEBop Evapotranspiration (ET), and snow water modelling. In January 2016 she travelled to Ethiopia to facilitate a FEWS NET workshop titled "Principles, Interpretations and Applications of the Operational Evapotranspiration Product for Drought Monitoring and Impact Assessment at Sub-District Scales" and participate in a field trip through north-central Ethiopia to evaluate current FEWS NET products (http://earlywarning.usgs.gov/ fews/) created at EROS Center. Last fall she attended the URISA GIS-Pro & NWGIS 2015 Conference in Spokane, WA and presented a paper on "Using Google Earth Engine to Create Evapotranspiration Maps".



Group picture of the workshop participants, the FEWS NET office in Addis Ababa and the beautiful view from Lalibella towards west.



Adam Case is a Geospatial Scientist at EROS Center. He is currently working on NLCD mapping as part of the National Land Cover Database (NLCD) project team. More specifically, he is helping to improve the NLCD Impervious data and testing new data and methods for the upcoming next generation NLCD (NLCD 2016). In the past year or more Adam took a brief break in NLCD related activities and has helped out on multiple different projects at EROS. These include the Sahel West Africa (SWA) project, CoNED project, GEMS Simulations and Understanding of Ecosystem Change – Land Carbon Modelling project, and the Landcover4Climate project (Mangrove mapping, and land cover mapping in Africa).

SDSU Geographers at EROS (cont'd)

Suzanne Cotillon, 2013 M.S. graduate, travels to West Africa several times a year as part of her work at the U.S. Geological Survey/EROS Center within the "Land Use Dynamics and Adapting to Climate Change in West Africa" project funded by the U.S. Agency for International Development (USAID). This project represents an effort to document and quantify the impacts of the environmental and land cover changes that are sweeping across 17 countries of the Sahel and West Africa. The land cover maps tell a story of rapid change in both natural and human landscapes of the region from 1975 to 2013. They are a unique product and an important tool for decision-makers facing the challenge of balancing the need to preserve natural ecosystems with the need to grow food for a fast growing population. Suzanne also mapped and monitored land use, tree cover, and soil, water, and vegetation conservation practices in Niger and Burkina Faso to support the Resilience in the Sahel Enhanced (RISE) USAID program. This program is part of an effort to work with regional and national partners across the Sahel to scale up practices that are having a positive impact on both livelihoods and the environment.



Sitting on the Greenwich Meridian 0° in Burkina Faso, March 2015.



Matthew Rigge is a Rangeland Ecologist working with the U.S Geological Survey (USGS). While at the USGS he has worked on a variety of rangeland applications of remote sensing and GIS. Projects have included high-resolution analyses of riparian vegetation response to Best Management Practice (BMP) implementation, mapping disturbance influences on rangeland carbon fluxes and productivity across the Great Plains, USA, and phenological analyses of rangelands. Additionally, he has participated in projects mapping soil organic carbon stocks and depth to permafrost across the Alaska Interior. His most recent research effort focuses on mapping fractional vegetation cover in shrublands and grasslands in the western United States. This Bureau of Land Management (BLM) funded effort seeks to enhance understanding of rangeland vegetation dynamics and enrich current NLCD (National Land Cover Database) classes. Ongoing modeling efforts will allow analysis of changes in fractional cover measurements through time.

EROS Geography Scholarship

SDSU Geography Alumni working at EROS have created a scholarship that is awarded annually to a deserving student in the Department of Geography. The recipient must be at least a sophomore student majoring in geography at SDSU with an interest in remote sensing. The 2012 student recipient, chosen by the Department of Geography Scholarship Committee, was **Byron Will-Noel**. Byron's thesis work focuses on the creation of classroom curriculum for Unmanned Aerial Systems (UAS), otherwise known as drones. He is working on developing sessions that can be plugged into existing classes, or that could be used as an outline for a complete UAS course.



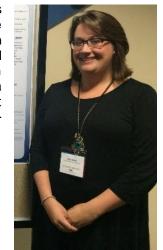


Activities of the Graduate Teaching Assistants (GTAs)



Sefa Adekpui's is an international student from Ghana, West Africa. With a prior background and undergraduate study in the field of psychology, Sefa is now a graduate student who is keenly interested in cultural and human geography, and using GIS techniques and data to map group and residential settlement patterns. His current research involves the use of GIS techniques to identifyr residential settlements of immigrants in nonmetropolitan towns in the United States. He is currently using Sioux Falls, South Dakota for his study area. Sefa works as a Teaching Assistant in the Geography Department of South Dakota State University, where he teaches the laboratory component of *Physical Geography of Natural Landscapes (GEOG 132L)*.

Ellen Bubak joined the department as a graduate student in the fall of 2014. Her academic focus is rural geography with regional focus on the American West and Great Plains. She is a graduate teaching assistant for *Cartography (GEOG 383L)* and *Introduction to GIS (GEOG 472L)*. Ellen presented at the 2015 South Dakota State University Geography Convention. She was awarded 1st place in the graduate division at the Great Plains Rocky Mountains regional AAG meeting in Kearney, NE in October 2015 for her research on healthcare access in South Dakota with a poster titled "A Long Way to 'Say Aah': An Analysis of South Dakotans in Healthcare Deficit Locations." Over the summer, Ellen conducted fieldwork for her thesis on amenity-driven development of former mining towns in Idaho, Utah, and Colorado.





Sam Cooper joined the Geography Department to pursue his Master's Degree in August 2015 after graduating from SDSU with a BS in Ecology and Environmental Science and a BA in Global Studies. His interests include natural resource management and ecological applications of Remote Sensing and GIS technologies. He is working with Dr. David Roy through a Geospatial Science Center of Excellence (GSCE) Graduate Research Assistantship to apply Terrestrial Laser Scanning and Structure from Motion techniques to grassland structure and biomass assessment for validation of Landsat products.

Joe Donahoe is a second year masters student in the Department of Geography. He received his bachelors' degrees in geography-GIS and mass communications at SDSU in the spring of 2014. He currently teaches geography laboratories for *Physical Geography: Weather & Climate (GEOG 131L)* on campus, as well as some GIS/Cartography laboratories. This is Joe's seventh year in Brookings, but Arlington, VA is where he calls home. Finally, Joe would like to personally welcome you to the Department of Geography at South Dakota State University!





Jeff Irwin is the Master Teaching Assistant for the *Physical Geography: Natural Landscapes Labs (GEOG 132L)*. Jeff received his B.S. in Geography from SDSU in 2014. Prior to attending SDSU, Jeff received an A.A.S. in Civil Engineering Technology from Southeast Technical Institute and has worked as a land surveyor since 2008. Jeff's interests include geomorphology and hazards. During the summer of 2015, Jeff traveled to the mountains of northwestern Portugal and Spain to conduct field research for his master's thesis (see page 3). In December, he traveled to San Jose State University in California to conduct lab work and analysis on the field samples from his summer fieldwork. Jeff plans to present some of the research at the annual meeting of the American Association of Geographers (AAG).

Activities of the Graduate Teaching Assistants (GTAs) (cont'd)

Confiance Mfuka's interests include Natural Resources monitoring using GIS techniques and Remote Sensing imagery as decision support. Current research includes forest cover and change mapping in the tropics, especially the Congo Basin using Landsat and MODIS data, and the use of sustainable agricultural practices as means of reducing deforestation. In the summer of 2015, Confiance worked with the World Resources Institute (WRI) as a GIS intern, analyzing deforestation trends in Central Africa, and contributing to the development of technical tools for forest monitoring. While pursuing his PhD in Geospatial Science and Engineering, Confiance is working at the Geography Department of SDSU as Teaching Assistant in charge of GIS labs (Introduction to GIS (GEOG 472L), GIS: Data Creation and Integration (GEOG 473L), GIS: Raster and Vector Modeling (GEOG 474L), and Advanced Applications for Natural Resources).





Sujan Parajuli's primary interests is in biogeography and natural resource management using Remote Sensing and GIS tools. He is also interested in climate change and adaptation strategies in the developing world. Currently, he is a graduate student in the master's program in Geography and is a Teaching Assistant in the Department of Geography and a Research Assistant in the Geospatial Science Center of Excellence (GSCE). While in Nepal, Sujan conducted Forest Inventory and Social Surveys in different community forests and also worked with LI-BIRD as a Local Adaptation Plan of Action (LAPA) Officer in one of remote villages of Nepal. He has presented his poster on ecosystem and sustainability at the International Student Conference in Ecosystem and Sustainability in Shanghai, China in June, 2015. He also attended the Great Plains-Rocky Mountain (GPRM) Regional AAG meeting in Kearney, NE in October 2015 and poster presentation on GIS day at EROS on November 18, 2015 (see page 1).

Dinesh Shrestha's has a keen interest in Urban Geography and he loves playing with the tools like GIS and Remote Sensing. He is also interested in Hydrology and Water Quality. Currently, he is a graduate student in the Master's program in Geography. He teaches geography 131/132 labs on campus, as well as some GIS labs. He is a Teaching Assistant in Department of Geography and Research Assistant in the Geospatial Science Center of Excellence (GSCE). He received his undergraduate degree in Geomatics Engineering from the Kathmandu University in Nepal. While in Nepal, he served as Department Head (Department of Quantity and Survey) in Puwa Khola 1 Hydropower Pvt. Ltd., and worked as Site Engineer in Khani Khola Hydropower project. He also attended the Great Plains-Rocky Mountain (GPRM) Regional AAG meeting in Kearney, NE in October 2015 and presented a poster on GIS day at EROS on November 18, 2015 (see page 1).



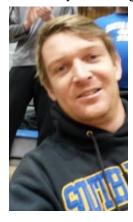


Annelieke Sinnema is a Teaching Assistant in the Department of Geography for labs in *Physical Geography: Weather and Climate (GEOG 131)*. She was born in the city of Arnhem in the Netherlands. She got her undergraduate degree in Social work and Community Development from the University of Applied Science in Utrecht, the Netherlands. She is currently working on her Master's in Sociology, with the Department of Sociology and Rural Studies. Her research interests are community development, immigration, and trafficking. Outside of school, she likes to travel a lot. She did an internship for her undergraduate degree in South Africa where she worked with Child Welfare. She taught English to children ages 4 to 16 in South Korea and Thailand. She is enjoying her new adventure studying in the United States at present. When she is finished with her master's she would love to work for an international organization that helps people in developing countries. She hopes she can give people some of the incredible opportunities she has had in her life.

Activities of the Graduate Teaching Assistants (GTAs) (cont'd)

Cassandra Stangeland continued her research interests in Eastern Europe, attending the annual *International Symposium on Present Environment and Sustainable Development* at the University of Alexandru Ioan Cuza in Iasi, Romania (see page 4), as well as traveling in Moldova, Hungary and Austria over the summer. This October, she attended the annual meeting of the AAG Great Plains-Rocky Mountain regional division in Kearney, NE to present her paper on refugee resettlement in South Dakota. Cassandra is the lead teaching assistant for the *Physical Geography: Weather and Climate (GEOG 131)* laboratory sections.





Byron Will-Noel is originally from South Africa, and has a BA in 'Development and Environment' as well as a BCOM Honors in Public Administration. Both are from the University of Stellenbosch. Outside of the department, Byron has been a farmer in South Africa as well as an educator in South Korea and Thailand. Byron's interests are with UAVs (Unmanned Aerial Vehicles; also known as drones), education, and noxious weed control. He is currently working on his Masters project, which focuses on UAV's in education. He hopes to assist SDSU in starting up their own 'drone' program in the near future. At the upcoming AAG meeting, Byron will present on his project. Currently, Byron is a Teaching Assistant with the geography department and a member of the geography club. In the future he hopes to work in the educational/academic field and to educate people on UAVs.

Virtual Colleagues

As the Department of Geography grows and adapts to the changing landscape of higher education, partnerships and collaborations with professional geographers are becoming increasingly important to delivering quality programs. Highlighted here are some of the professional geographers and the contributions that they are making to enhance our programs.



Patrick Danielson received his Master's degree in Geography from SDSU in December of 2012. He currently works full time as a Senior Scientist at the USGS Earth Resources Observation and Science (EROS) Center. He is working on the National Land Cover Database (NLCD) program where he helps to develop the methods and procedures to map land cover change. In addition, he is an instructor for the Geography Department. For 2015 he taught *Physical Geography: Weather & Climate (GEOG 131)* at the University Center in Sioux Falls. He also taught an online course in *Environmental Disasters and Human Hazards (GEOG 343)* for the department and helped teach an Intro to Geographic Information Systems (GIS) Remote Sensing course.



Dr. Todd Gardner teaches *Population Geography (GEOG425)* as an online course for the department. He has worked at the U.S. Census Bureau for 16 years and is currently a researcher in the Federal Statistical Research Data Center network. His research has focused on metropolitan population change, particularly racial/ethnic composition of the urban and suburban populations. His current research project is a study of the population affected by Hurricane Katrina. He has also developed a new online course, the *Geography of Armed Conflict (GEOG490)*.



Robert Hill teaches an online course titled: Principles of State, Regional, and Community Planning (PLAN 471/571). He works for Brookings County, SD as the County Development Director which is a combination of the Planning, Zoning and Drainage and the Emergency Management Departments.

For continuing education in 2015, he presented at the ND/SD/ Pipeline Safety Operators Training Conference in Sioux Falls, and attended an Eastern SD Integrated Weather Team Workshop held at EROS Data Center, the National Association of Counties (NACo) Annual Conference in Charlotte, NC, the International Association of Emergency Managers (IAEM) Conference in Clark County, NV and the Pipeline Safety Trust Conference in New Orleans, LA.

In 2015 he received certification as a Certified Emergency Manager (CEM) by the IAEM.

Virtual Colleagues (cont'd)



Alina Negoescu lives in Sibiu, Romania and teaches the *Geography of Tourism (GEOG 420-520)* during fall semesters. In her course, she wants students to discover beautiful places in Europe and all over the world as well as the effects that tourism has on people and places. Alina is interested in tourism as a major phenomenon of the contemporary world and tourism advertising. For her PhD dissertation, she studied tourist brochures from Sibiu and South Dakota. She has authored and coauthored several articles related to tourism, published in Romania.



Dr. **David A. Parr** teaches *GIS: Data Creation and Integration (GEOG 473/573)* and *GIS: Vector and Raster Modeling (GEOG 474/574)*. His area of emphases includes introductory and advanced GIS courses and related computer science classes focused on Python, web mapping, and spatial databases. David's research includes modeling the social, technological, and spatial impacts of collaborative mapping efforts, social networking, and geographic citizen science projects



Dr. **João Santos** has research interests in glacial geomorphology and paleoclimatology. Since 2005, he has spent his summers in south-central Alaska reconstructing the Holocene glacial and climatic chronology of the tidewater glaciers of College Fjord using glacial sedimentology, remote sensing, dendrochronology, and 14C dating as his research tools.

In 2013, he started a research project on the glacial geomorphology and history of the mountain ranges of the northwestern portion of the Iberian Peninsula. In January 2015, he published the first results of his research on the glaciation of the Serra da Peneda Mountains of Portugal in the international journal *Physical Geography*. In the summer of 2015 research on the glaciation of the neighboring Serra do Gerês Mountains of Portugal started with support from colleagues of the University of Leon, Spain and SDSU geography graduate student Jeffery Irwin. This research is expected to produce a publication in a peer-reviewed international journal and a master's thesis (Jeffery Irwin).

In 2015 João also presented two papers about his glacial research in the northwestern portion of the Iberian Peninsula in the Geological Society of America and the International Permafrost Association (Iberian Section) annual meetings.

João teaches *Physical Geography: Weather and Climate (GEOG 131)* and *Physical Geography: Natural Landscapes (GEOG 132)* online. He is a husband and a father of two boys. João is from northern Portugal but has been living in the United States since 1998.



Dr. Karl J. Schmidt teaches *Introduction to Geography (GEOG 101)* for the department, which he developed as a new online course offering beginning in Fall 2012. A specialist in South Asia, he has led numerous student and faculty groups to India and is the author of *An Atlas and Survey of South Asian History*, which continues to be a popular textbook in the field. He has also taught *Regional Geography: South Asia (GEOG 320)* online for the department. His academic interests include introductory geography, world regional geography, and historical geography. Trained in both cartography and air photo interpretation, early work in his career focused on wetland mapping as part of the National Wetlands Inventory, a project of the US Fish and Wildlife Service. He lives on an acreage outside Estelline, SD, which he shares with his wife and two sons.



<u>Lauri B. Sohl</u> continues to teach *Introduction to Geographic Information Systems (GEOG 472)* and *Geographic Applications (GEOG 475)*, which focuses on Urban Geography, online. Her teaching methodology includes both practical and theoretical methods. Her professional interests include the collaboration, investigation, and dissemination of GIS and local organizational data on the web and in the cloud and via Open Data, derivative creation from LiDAR, urban geography analysis and methods, in addition to her work for the City of Sioux Falls, currently as a GIS Manager, for over eighteen years. Lauri attended and participated in the ESRI International User Conference and other regional conferences. Lauri continued to participate, educate, and present at Women in Science and other events that promote science education in K-12 and higher education.

Activities of the Geography Faculty



Yan Lin had two peer-reviewed papers accepted for publication and she also coauthored two papers. She presented three papers at the Annual meeting of American Association of Geographers (AAG), and the Applied Geography Conference, as well as the Annual Sanford Health – SDSU Biomedical Research Symposium. She traveled to China in the summer and visited Wuhan University and Central South University. Dr. Lin attended the International Conference on Geoinformatics held in Wuhan and presented a paper there. She started to serve as an at-large board member of the AAG Health/medical geography specialty group. She continues to serve the Ethel Austin Martin Nutrition Committee and as a coordinator of SDSU ESRI program.



Kim McCullough graduated with her Master's Degree in Geography from South Dakota State University in 2003. After graduation Kim worked at the Flandreau Indian School in Flandreau, South Dakota. In the spring of 2014, she came back to work as an instructor in the geography department. She was nominated for the Honors College Teacher of the Year in 2016. She has taught Physical Geography 131: Weather and Climate, Physical Geography 132: Geomorphology, Human Geography, and World Regional Geography.



Bruce Millett continued research as the Co-Principal Investigator on a Cancer Geocoding project funded by DHHS/Centers for Disease Control (CDC) through (FPT) SD Department of Health (DOH). He is also working on a proposal to the National Science Foundation as a collaborator for the Rural Coop Digital Ag Big Data Network. He has a paper that has been accepted for publication in the Journal of the American Water Resources Association titled Modeling the Effects of Tile Drain Placement on the Hydrologic Function of Farmed Prairie Wetlands. In addition, Bruce serves as the faculty advisor for the Geography Club.



Darrell Napton devoted much of the past year to coordinating graduate teaching assistants and helping upgrade the department's physical geography labs. During the fall semester he started working with Physical Geography: Weather and Climate in addition to Physical Geography: Natural Landscapes. Darrell also chaired both Department of Geography search committees, in addition to organizing and coordinating Professor Will Graf's Geography Awareness Week trip and talks. Additionally, he served on the SDSU Promotion and Tenure Committee and the SDSU Archives and Special Collections Committee. Darrell's publications included, "The Southern Piedmont's Continued Land-Use Evolution, 1973-2011" in the *Southeastern Geographer* (Auch, Roger F., Darrell E. Napton, Kristi L. Sayler, Mark A. Drummond, Steve Kambly, and Daniel G. Sorenson), and his presentations included Suzanne Cotillon and Darrell Napton "Impacts of Land Cover Changes on Ecosystem Services Delivery in the Black Hills Ecoregion 1950-2010" presented at the annual meeting of the American Association of Geographers (AAG).



Dasuni Ranapathi Arachchige biggest accomplishment for 2015 was obtaining her Master of Science degree in Geography from University of North Dakota (Spring 2015). Successful completion of her master's thesis on "Mapping Flash Flood Potential in Turtle River and Forest River Watersheds in North Dakota" was the other main accomplishment. Then she joined SDSU Geography as a temporary instructor to teach the two undergraduate physical geography courses (GEOG 131 and 132). She learned many new and certainly important things about teaching, interacting with students and many other things after joining SDSU Geography. It was quite a year for her.

Activities of the Geography Faculty (cont'd)



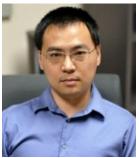
David Roy published six peer reviewed journal articles and a book chapter and with his students and research staff gave research papers in the US in Chicago, San Francisco, Sioux Falls, and Washington DC, and internationally presented at meetings held in Beijing (China), Limassol (Cyprus), and Southampton (U.K.). He secured a \$700,000 NASA grant to study burned areas using NASA/USGS Landsat 8 and European Space Agency (ESA) Sentinel-2 satellite data. He continued to serve as co-chair of the USGS NASA Landsat science team, chair of the NASA U.S Land Processes (LP) Distributed Active Archive Center (DAAC) user working group, and as a member of the NASA MODIS land science team, the NASA Suomi National Polar-orbiting Partnership (NPP) Land Science Team, and the GOFC-GOLD Fire Implementation team. He chaired an external review of the Remote Sensing and GIS M.Sc. Program in the College of Humanities and Social Sciences, United Arab Emirates University (UAEU) which included a 3-day site visit to the UAEU AI Ain and Abu Dhabi campuses and discussions with administration, faculty, students and alumni. Dr. Roy graduated two of his Ph.D. students in the SDSU Geospatial Science and Engineering program and one student in the SDSU Geography Master of Science program.



Bob Watrel co-authored one book chapter, "Bible Belt Membership Patterns, Correlates and Landscapes," in Stanley D. Brunn (editor), *The Changing World Religion Map: Sacred Places, Identities, Practices and Politics*. New York: Springer Press and co-authored one journal article, "Reapportionment, Regional Politics and Partisan Gains." *Extensions: A Journal of the Carl Albert Congressional Research and Studies Center*. He also received a Provost's Administration Fellowship for the 2015-2016 academic year and presented papers at two conferences in Chicago, IL and Kearney, NE



George W. White attend the annual meeting of the AAG in Chicago (April 21-25). He also continued his work with the South Dakota Geographic Alliance (SDGA) (see page 5). With Trisha Jackson and Md Rajibul Al Mamun, he also co-authored an article entitled "Does the Geography Major Fit in STEM?" in the *Journal of Geography and Geology*. Dr. White also attended the annual meeting of the Great Plains-Rocky Mountain division in Kearney, Nebraska and served on a panel entitled "Geographic Alliance Activities in the GPRM Region." At the Annual Conference of the National Council of Geographic Education Washington D.C. he presented a paper with Emily White entitled "Teaching ArcGIS Online and Story Maps."



Lin Yan worked on crop field extraction and land cover and land use change using Landsat imageries. He published two papers as the first author and co-authored another paper, which were all on *Remote Sensing and Environment*. He co-authored a book chapter on remote sensing time series in the *Remote Sensing and Digital Image Processing*. He made two oral presentations on wall-to-wall crop field extraction in Conterminous United States at the AAG Annual Meeting and the AGU Fall Meeting.



Xiaoyang Zhang published six peer reviewed articles in international remote sensing and geoscience journals, and presented fourteen research papers in conferences including AAG in Chicago, AGU Fall Meeting in San Francisco, NOAA JPSS Annual Science Meeting in Washington DC, NASA MODIS and VIIRS Science Team Meeting in Washington DC, and the Third International Conference on Phenology in Turkey. He traveled to China in June 2015 and visited the Institute of Remote Sensing and Digital Earth, Beijing Normal University, Zhejiang University, and Hangzhou Normal University. During his travel, he made six presentations. As a PI or CoI, he prepared four proposals and two were selected to work on global biomass burning emissions and climate change impacts on land-surface phenology.

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Geography Club in the Hobo Day Parade: October 24, 2015



Ellen Bubak & Jeff Irwin



Left to right: Thomas Henebry, Jeff Irwin, Ellen Bubak, Garth Wadsworth, Annelieke Sinnema and Byron Will-Noel.