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Program Review: Geography Department

University of Nebraska at Kearney Department of Geography Faculty

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GEOGRAPHY REVIEW TEAM MEMBERS

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ABSTRACT

This Self-Study of the UNK Geography Program offers an overview of the program, its characteristics, performance, resources, institutional contributions, student profiles, and faculty qualities since the last program review. The Self-Study concludes with a summary of faculty goals and plans for the Geography Program. The Geography Program is committed to the delivery high quality instructional programs that prepare students to become life-long learners through an academically sound program of study, while at the same time participating fully in the traditional missions of teaching, research, and service. Geography faculty are invested in supporting students, developing the Program, and continuing to build the quality of Geography at UNK. The Geography Program is well positioned and willing to develop and expand to meet the needs of students and the UNK campus.

UNK GEOGRAPHY PROGRAM ACADEMIC PROGRAM REVIEW 2022

I. GENERAL PROGRAM CHARACTERISTICS

This section discusses Geography Programs, their history, mission, goals, their relationship to UNK's Mission and Vision, and the APR recommendations from 2014-2015.

A. DEPARTMENT ROLE AND MISSION

Geography is an integral part of the University of Nebraska-Kearney. The program provides students with educational opportunities that develop an understanding of the state, nation, and world. The Department of Geography is administratively associated with the College of Arts and Sciences (CAS).

Within the tripartite nature of the academy (teaching, research, and service) geography faculty recognize their interconnectedness in the mission of the university—the exploration, advancement, and purveying of knowledge. The Department emphasizes sound teaching through the integration of quality scholarly research that serves students, the university, and the discipline. As the integrating spatial science, geography is unique in its ability to bring a geographic perspective and spatial analysis component to disciplines in both the social and natural sciences. Through the integration of teaching and research and a curriculum that supports this spatial tradition, geography provides several major programs of study, as well as supporting graduate and undergraduate programs across campus.

This integrating geographic perspective is especially evident in UNK's General Studies Program. The Department's approach is both a foundation for careers in geographical fields and a major component in the acquisition of a well-rounded education outlined in the General Studies Program.

The Department offers the following majors and minors as well as advising students in a preprofessional program: Geography, Bachelor of Arts

Geography, Bachelor of Science Geography and GIScience, Bachelor of Science Geography, 7-12 Teaching Subject Endorsement Option Geography, Minor GIScience, Minor Environmental Science, Minor

Geography is considered a social and natural science, a bridge discipline that incorporates the physical sciences as they relate to the earth and those disciplines dealing with human conditions. Geography is the discipline that treats the inter-relationships of people and the land. The Department of Geography strives to promote integrated research and teaching to provide geographic perspective to Baccalaureate degrees. These purposes lead to an array of academic courses serving curricula at all levels of the institution.

For students choosing to study geography through the General Studies Program, the Department has a substantial and diverse presence in UNK's General Studies Program. Divided into eleven categories, the Department has a presence in four categories.

Loper 7 Social Science

Geography 104	World Regional Geography
Geography 106	Human Geography
Geography 206	Geography of the United States and Canada

Loper 8 Natural Science

Geography 101	Physical Geography I: The Atmosphere
Geography 102	Physical Geography II: The Lithosphere
Geography 103	The Dynamic Planet
Geography 201	Earth Science
Geography 209	Meteorology

Loper 9 Civic Competency and Engagement

Geography 323	Political Geography

Loper 10 Respect for Human Diversity

Geography 104	World Regional Geography
Geography 106	Human Geography
Geography 206	Geography of the United States and Canada

The Department provides both introductory and upper-level courses in service to all three colleges at UNK, including the following departments and programs:

*General Studies *Department of Cyber Systems *International Business *Department of History *Department of History, Social Science Program *International Studies Program *Sociology 7-12 Teaching Endorsement *Department of Teacher Education, Middle Grades Major *Department of Economics, Agribusiness Major *Department of Kinesiology and Sport Sciences, Recreation and Park Management *Department of Economics, Economics Major *Department of Teacher Education, Special **Education Major** *Honors Program *Department of Biology, Biology Major

*Department of Physics and Physical Science, Science Minor-Elementary Education *Department of Kinesiology and Sport Sciences, Travel and Tourism Minor *Department of Economics, Business Administration Major *UNMC College of Nursing, Bachelor of Science in Nursing *Department of Kinesiology and Sport Sciences, Athletic Training Major *Department of Kinesiology and Sport Sciences, Physical Education Major *Department of Industrial Technology, Industrial Technology Major-Construction Management *Department of Industrial Technology, Industrial Technology Major-Aviation Systems *Department of Marketing and MIS, **Business Administration**

Geography 101-The Atmosphere

Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement

Geography 102-The Lithosphere

Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement

Geography 103-Dynamic Planet

Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement Construction Management Comprehensive Athletic Training Comprehensive Health and Physical Education PK-12

Geography 104-World Regional Geography

Psychology 7-12 Teaching Subject Endorsement Sociology 7-12 Teaching Subject Endorsement Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement History 7-12 Teaching Subject Endorsement Pre-Nursing International Studies Major/Minor Social Science 7-12 Teaching Field Endorsement

Geography 106-Human Geography

Psychology 7-12 Teaching Subject Endorsement Sociology 7-12 Teaching Subject Endorsement Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement History 7-12 Teaching Subject Endorsement Pre-Nursing International Studies Major/Minor Social Science 7-12 Teaching Field Endorsement Nebraska Studies Minor

Geography 201-Earth Science

Chemistry 7-12 Teaching Subject Endorsement

Geography 206-Geography of the United States and Canada

Psychology 7-12 Teaching Subject Endorsement Sociology 7-12 Teaching Subject Endorsement

Geography 209-Meteorology

Middle Level 5-9 Teaching Subject Endorsement Special Education 7-12 Teaching Subject Endorsement Aviation Systems Management Comprehensive

Geography 300-Map Investigation

Social Science 7-12 Teaching Subject Endorsement Recreation, Outdoor and Event Management Comprehensive

Geography 301-Geography of Soils

Agribusiness Comprehensive

Geography 309-Climatology

International Studies Public Health Minor International Studies Minor

Geography 321-Economic Geography

Public Administration Sociology 7-12 Teaching Subject Endorsement Agribusiness Comprehensive Business Administration Comprehensive (Economics) International Studies Major/Minor

Geography 322-Urban Geography

International Studies Major/Minor

Geography 323-Political Geography

International Studies Major/Minor

Geography 416/816-Applications of Geographic Information Systems

Biology Comprehensive Biology Graduate Program

Geography 417/817-GIScience Principles and Concepts

Biology Comprehensive Biology Graduate Program Business Management Agribusiness Comprehensive Public Health Minor Data Analytics Minor

Geography 418/818-Working with GIScience and Spatial Analytics

Biology Comprehensive Agribusiness Comprehensive Recreation, Outdoor and Event Management Criminal Justice

Even though the Department of Geography does not offer a graduate degree, several of our upper division courses are utilized by graduate students in other departments. The following geography courses are offered to graduate students. Geography 800-Water Resources Geography 809-Cartography Geography 810-Geographical Techniques and Thought Geography 816-Applications of GIScience Geography 817-GIScience Principles and Concepts Geography 818-Working with GIScience and Spatial Analysis Geography 819-Remote Sensing of the Environment Geography 840-Seminar in Regional Geography Geography 841-Selected Topics in Cultural Geography Geography 856-Field Study **Geography 858-Great Plains Studies** Geography 890-Directed Research **Geography 898-Directed Readings** Geography 899-Independent Study

Geography faculty are also involved in a wide variety of service activities ranging across the college, institution, community, state, and region. Faculty serve and provide leadership on college and university-wide committees, provide a variety of external services to local, regional, and state agencies and government, and serve a variety of professional organizations.

B. Geography Program History

Prior to 1960, there was only one geography instructor at Kearney State College. Additional faculty were added in 1960, 1964, 1967, and 1968. The period between 1968 and 1987 saw several changes in personnel but the FTE remained at or near five. In 1987, a sixth permanent faculty position was filled.

Dr. Jeremy Dillon was hired in February 2002 to begin in the fall semester. This was to give the Department four full-time 12-hour faculty, two 9/3 faculty, one adjunct instructor, and an additional lecturer. With Larry Becker as chair and Lori Becker teaching two upper-division courses, the Department had the capability to offer twenty-four class sections, or seventy-four hours per semester. In the summer of 2002, the sudden resignation of Dr. Becker and his wife Lori resulted in the loss of 1.66 FTE. In August 2002, the decision was made to not fill Dr. Becker's vacant position and it was also determined to eliminate the position entirely.

In November 2002, the Department presented a reorganization plan and received approval from the administration to merge the Department of Geography and Department of Sociology and form the Department of Sociology, Geography and Earth Science as of July 1, 2003. In November 2002, geography received support for part-time support staff.

In December 2002, Robert Lind announced his retirement effective May 2003. In 2002, geography faculty undertook a curricular review and reformation. In order to adjust to new faculty resources, the Department dropped a variety of courses from the curriculum, restructured all degree programs, and eliminated the comprehensive major with a global-human emphasis. The changes became effective in fall of 2003.

In June 2003, Dr. Paul Burger was hired to replace Robert Lind and to establish the GIS program. On July 1, 2003, geography became part of the Department of Sociology, Geography and Earth Science with Stan Dart serving as Chair of the combined programs, and a shared support staff (Valerie Vierk) between the programs was established.

In fall 2003, geography faculty undertook yet another round of curricular revisions. It was intended as an intermediate step as the faculty transitioned from one in which all members were hired prior to Kearney State College's entrance into the university system in 1991, did not possess terminal degrees, and held twelve-hour teaching loads, to that of the university model in which a terminal degree is required along with a three-hour scholarship component.

In fall of 2005, Mr. Gordon Bennett announced his retirement. In June of 2006, Dr. John Bauer was hired to replace Mr. Bennett. In July 2007, Steele Becker and Stan Dart retired. Following those retirements, Dr. Jason Combs was hired as a human geographer while Dr. Vijendra Boken was hired as a physical geographer. Although these faculty were "replacements" for retiring faculty, both brought additional areas of expertise in terms of research methods and content that previously did not exist within the program. With these hires, all of the former 12-hour teaching load faculty have been replaced with faculty with research expectations.

On July 1, 2007, Dr. Paul Burger assumed duties as Chair for the Department of Sociology, Geography and Earth Science. In April of 2008, a formal request was made and the process

begun to separate SGES into Sociology and Geography, respectively. That request received UNK approval and was forwarded to Varner Hall in Lincoln in December of 2008. Subsequently, additional information was requested by and provided to Central Administration by the Department.

Following the addition of two new tenure-track faculty in 2007-2008 the final phase of curricular revisions was implemented by dropping the comprehensive major. This included a restructuring of nearly every major and minor to allow greater flexibility to students as well as faculty loads. Courses were also added covering areas or additional expertise of new faculty. Finally, a cross-disciplinary environmental science minor offered jointly with biology and chemistry was added.

In recent years, the Department of Geography has retained three adjunct instructors—Jean Eichhorst, Matt Engel, and Nate Eidem. Jean taught classes from 2000-2012 while Matt Engel's term was shorter—his last year was 2020. Nate Eidem started teaching in 2010 for the Department and maintains a critical role teaching a mix of introductory and upper-division courses.

Val Vierk served as support staff from 1993 through 2017. After her retirement the department was left with no support staff for several years, an unfortunate and unhealthy situation.

Recently, Copeland Hall—where the Department of Geography is located—has undergone a number of renovations. During renovations the Department lost considerable space at the north end of Second Floor Copeland yet gained Copeland 254 for GIScience. Copeland Hall 220 was formerly a GIS/Cartography classroom and is now the Political Science office suite.

Once Political Science and Criminal Justice transitioned to Copeland Hall from Warner Hall, the three departments on the second floor were authorized to search for support staff. Darcy Isaac was hired to fill that position in December 2020.

In 2021/2022 the Environmental Science minor was updated and is now supported by the Department of Geography, the Department of Biology, and the Department of Political Science.

Currently there are five tenure-track geography faculty and one adjunct instructor, along with a support staff position shared by three departments (Political Science, Criminal Justice, and Geography).

C. Governance

The Department of Geography chair is selected according to procedures established in the CAS Constitution.

The Department Chair shall be responsible to the Dean for departmental administration; be the department's official representative in all matters except those delegated to other members of the department; and serve as intermediary between the department and other individuals and units of the University. Chairs shall be appointed by the Board of Regents, upon recommendation of the Dean, after appropriate consultation with the departmental faculty and concurrence by the Chancellor and the President, for a term not exceeding five years but eligible for reappointment. Prior to recommending the reappointment of a chair, the Dean shall take a closed ballot of the department members on the question of reappointment of the incumbent. In case of a vacancy existing or pending in a department chair, the Dean will request the department to provide suggestions and the name or names of candidates, a request which shall be fulfilled through means adopted by the department.

The Department of Geography chair will be a member of the CAS Council of Chairs. The Council of Department Chairs shall consist of Deans, Assistant and Associate Deans, Chairs and Directors of all departments and programs of the College. The Dean and Assistant and Associate Deans of the College, and the Directors of divisions or programs administered by the College, shall be non-voting members of the Council. In the event a member must be absent from a Council meeting, a representative to the Council meeting may be appointed by the absent member. The Council shall: a.) Advise the Dean in matters relating to administrative policies and procedures within the College of Arts and Sciences and its departments or other administrative units. These advisory duties shall not supersede those delegated to the Advisory and Educational Policy Committees as defined in Article II, Section 1. b.) Make recommendations to the Dean in matters relating to University administrative policies and procedures which affect the College of Arts and Sciences and its departments or other administrative units. c.) Provide a forum for discussion of mutual problems and concerns relating to the administration of departments or other units within the College of Arts and Sciences.

The chair essentially manages the administration of the program which includes the following: the day-to-day activities of the department; responsibility for the operating budget; scheduling courses for each semester; planning rotations of future course offerings; strategic planning; recruiting students to courses, majors, and minor; delegating responsibilities for assessment, and other committee assignments; establishing department meetings; setting meeting agendas; encouraging faculty development; directing and coordinating office associate responsibilities; coordinating and communicating with other programs using Geography courses; and coordinating and evaluating 7-12 Teaching Endorsements.

D. Budget

The budget for the Geography Program covers the cost of faculty members and office associate. The non-personnel operating budget is \$10,919 and covers the cost of office expenses, including paper, phone, photocopy lease, office supplies, telephone bill, a portion of an office work study,

and minimal contributions to travel for each faculty member. The non-personnel operating budget is supported by a capital budget of \$4,500.

E. Benchmarks and Recommendations from Previous Program Reviews

A program review was conducted in 2009 (*Dr. Don Hagan, Northwest Missouri State University, Dr. Julie Campbell, Assistant Professor of Criminal Justice, Dr. Glen Powell, Professor and Associate Dean, College of Education, Mr. Brett Chloupek, Alumni Representative)* and another during 2014-2015 (*Dr. George White, Chair, South Dakota State University, Dr. Ken Anderson, College of Education, Mr. Jake McGlade, Alumni Representative, Kaitlyn Taylor, Student Representative, Dr. Julie Campbell, Past APR Representative, Dr. Kim Carlson, NSS Ed Policy Committee). Neither review received a response from the UNK administration.*

II. DEGREE PROGRAMS AND CURRICULA

The Geography Program currently provides three degree major options, a teaching subject endorsement, and several minors.

Degree Options

Bachelor of Arts, Geography Bachelor of Science, Geography Bachelor of Science, Geography and GIScience Geography 7-12 Teaching Subject Endorsement Minor, GIScience Minor, Environmental Science Minor, Geography

Bachelor of Arts

Physical Geography I: The Atmosphere Physical Geography II: The Lithosphere World Regional Geography	4 3 3 3 3
	2
	3
Map Investigation or Cartography	3
ollowing:	
e	3
• • • •	3
Special Topics in GIS, Spatial Analysis and Remote Sensing	3 3
ography 300-499	12
	35
	35
	35
Physical Geography I: The Atmosphere	35 4
Physical Geography I: The Atmosphere Physical Geography II: The Lithosphere	
	4 4
Physical Geography II: The Lithosphere World Regional Geography	4
Physical Geography II: The Lithosphere	4 4
Physical Geography II: The Lithosphere World Regional Geography Human Geography	4 4 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada	4 4 3 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Geography of the United States and Canada	4 4 3 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Geography of the United States and Canada Map Investigation	4 4 3 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Geography of the United States and Canada Map Investigation Cartography	4 4 3 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Geography of the United States and Canada Map Investigation Cartography GIScience Principles and Concepts	4 4 3 3 3
Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Geography of the United States and Canada Map Investigation Cartography	4 4 3 3
	Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Map Investigation or Cartography ollowing: Geographical Techniques and Thought Internship Special Topics in GIS, Spatial Analysis and Remote Sensing

Select 3 credit hours of the fo Geography 410 Geography 415 Geography 416 Geography 443	llowing: Geographical Techniques and Thoughts Internship Applications of Geographic Information Systems Special Topics in GIS, Spatial Analysis and Remote Sensing	3 1-3 3 3
Select 9 credit hours of Geog Total Credit Hours	raphy 300-499	9 32
Geography and GIScience		
Geography 101 Geography 102 Geography 104 Geography 106 Geography 206 Geography 409 Geography 416 Geography 417 Geography 418 Geography 419	Physical Geography I: The Atmosphere Physical Geography II: The Lithosphere World Regional Geography Human Geography Geography of the United States and Canada Cartography Applications of Geographic Information Systems GIScience Principles and Concepts Working with GIScience and Spatial Analysis Remote Sensing of the Environment	4 3 3 3 3 3 4 3 3
Select three credit hours of G Total Credit Hours	eography 300-499	3 36
Geography 7-12 Teaching S Geography Subject Endorsen Geography 102 Geography 104 Geography 106 Geography 206 Geography 300 Geography 321 SOSC 370		4 3 3 3 3 3 3 3
Select a minimum of five creater	dit hours of any Geography 300-499	5
Select six credit hours of Eco Psychology, or Sociology Total Credit Hours	nomics, History, Political Science,	6 33

Minor, GIScience		
Geography 101 or 102	Physical Geography I: The Atmosphere	4
Seegraphy for of for	Physical Geography II: The Lithosphere	4
Geography 104 or 106	World Regional Geography	3
	Human Geography	3
Geography 409	Cartography	3
Geography 416	Applications of Geographic Information Systems	3
Geography 417	GIScience Principles and Concepts	4
Geography 418	Working with GIScience and Spatial Analysis	3
Geography 419	Remote Sensing of the Environment	3
Select any Geography Election	ves	1-3
Total Credit Hours		24-26
Minor, Environmental Scie	NB CO	
Take both of the following:		
Biology 103	General Biology	4
Geography 102	Physical Geography II: The Lithosphere	4
	I take all of the following in that emphasis:	•
(Geography)		
Geography 305	Environmental Conservation	3
Geography 417	GIScience Principles and Concepts	4
Geography 419	Remote Sensing of the Environment	3
	following electives outside of your emphasis area:	-
(Geography)		
Geography 256	Geology Field Study	3
Geography 301	Geography of Soils	3
Geography 305	Environmental Conservation	3
Geography 416	Applications of Geographic Information Systems	3
Geography 417	GIScience Principles and Concepts	4
Geography 418	Working with GIScience and Spatial Analysis	3
Geography 419	Remote Sensing of the Environment	3
Total Credit Hours		23-24
Minor, Geography		
Geography 101 or 102	Physical Geography I: The Atmosphere	4
	Physical Geography II: The Lithosphere	4
Geography 104	World Regional Geography	3
Geography 106	Human Geography	3
Geography 206	Geography of the United States and Canada	3
Geography 300	Map Investigation	3 3
Select one of the following:		
Geography 207	Physical Geology	3

Geography 301	Geography of Soils	3
Geography 306	Geomorphology	3
Geography 309	Climatology	3
Select five credit hours of the Geography 300-499 Total Credit Hours	following:	5 24

III. STUDENT PERFORMANCE MEASURES

The mission of the UNK Geography Department is to provide students an understanding of the major branches of Geography and teach skills required to collect, apply, analyze, and present the results of their own geographic inquiry and analysis through writing and presentation, thus making a successful entry into industry workforce or graduate school.

A. Assessment

The Geography Department's Assessment Plan is focused on the teaching and research mission of the Department, which in turn is based upon the nature of Geography.

The Assessment Plan and its associated procedures were adopted by the Department in 2012 and were first used to assess the 2011-2012 academic year. We have used the plan to assess every academic year since. The Department submits results of our assessment, along with our analysis of the data and any recommendations for change, to the UNK Office of Assessment as required on an annual basis.

The Geography faculty annually review and discuss the assessment results in conjunction with evaluating our overall program. Based on the data obtained through our analysis of the assessment results, the Department may implement changes in curriculum, degree programs, faculty teaching assignments and/or program policies.

The Plan assesses our baccalaureate degrees. It uses major student projects from selected upper-level geography courses as a direct assessment tool, along with surveys of graduating seniors as an indirect tool. Five learning outcomes are derived from the Department's mission. They are placed in two categories: communication outcomes and geographical inquiry and analysis outcomes.

Communication outcomes:

- 1. Students will demonstrate professional levels of writing in order to communicate effectively.
- 2. Students will demonstrate professional levels of oral communication in order to communicate effectively.

Geographical inquiry and analysis outcomes:

- 3. Students will appropriately analyze geographic data in order to derive relevant geographic information.
- 4. Students will appropriately interpret geographic information in order to draw informed conclusions.

5. Students will demonstrate critical thinking skills in order to answer geographic questions and solve geographic problems.

Direct assessment measures: major project from selected courses.

Each of the following courses culminates with a student project, such as a term paper, oral presentation, poster presentation, electronic map or model, advanced geo-spatial analysis, or original field or laboratory research. These courses are taught on a regular rotation. They were chosen because they are where the Program's learning outcomes are taught and practiced at the highest level.

GEOG 301, Geography of Soils - 3 hours GEOG 305, Environmental Conservation - 3 hours GEOG 410, Geographical Techniques and Thought - 3 hours GEOG 416, Applications of Geographic Information Systems - 3 hours GEOG 419, Remote Sensing of Environment - 3 hours

Please note that the following courses: Geog 440, Special Topics in Regional Geography; Geog 441, Special Topics in Human Geography; Geog 442, Special Topics in Physical Geography; Geog 443, Special Topics in GIS, Spatial Analysis, and Remote Sensing; Geog 450, Senior Geography Project; are taught on occasion and may also be included whenever they require a major student project.

Indirect assessment measures: survey of graduating geography majors.

Each graduating Geography major is asked to complete a Survey of Graduating Geography Majors. The purpose of the survey is to gather information from graduating seniors so the department can identify deficient or redundant areas, as well as successes. Where appropriate, the Program can alter practices or structures to improve the quality of Geography education.

B. Student Presentations and Awards

Student presentations at local, regional, and national conferences reflect direct measures of student performance. From 2017-2021, geography faculty supported **thirty-one student presentations**, with a number of posters winning awards and several were ultimately published in peer-reviewed journals.

Geography Student Presentations 2017-2021

2017

Coughlin, Ava. Analysis of Cancer Survivor's Accessibility to Exclusively Tailored Exercise Programs in Nebraska, UNK Student Research Day.

Gosnell, Connor. Locating a Community Garden Using GIScience in Omaha's Food Dessert, UNK Student Research Day.

Neil, Emma. History of the Death Penalty. UNK Student Research Day.

Winfield, Natasha. Spatial Examination of Nebraska's Pioneer and Heritage Farms, UNK Student Research Day

2018

Claire M. Christner. A Geography of Advertising in Early Automobile Route Guides. Poster presented at the Great Plains/Rocky Mountain Division Annual Meeting, American Association of Geographers, Manhattan, Kansas.

Rene E. Ingersoll. The Spatial Arrangement of Shinto Shrines. Poster presented at the 2018 Annual Fall Student Research Symposium, UNK.

Coughlin, Ava. AN ANALYSIS OF CANCER SURVIVOR'S ACCESSIBILITY TO EXCLUSIVELY TAILORED EXERCISE PROGRAMS IN NEBRASKA. Student Research Day - UNK – 1st Place Graduate Student Division.

Gosnell, Conner. LOCATING A COMMUNITY GARDEN USING GISCIENCE IN OMAHA'S FOOD DESERT. Student Research Day - UNK. Kearney, Nebraska – 3rd Place Behavioral and Social Science.

Neil, Emma. NEBRASKA'S DEATH PENALTY: FOR OR AGAINST. Student Research Day - UNK. Kearney, Nebraska.

Winfield, Natasha. SPATIAL EXAMINATION OF NEBRASKA'S PIONEER AND HERITAGE FARMS. Student Research Day - UNK. Kearney, Nebraska.

Dillon, J.S., **May, R., Nichol, D.,** and **Urban, D.** The possible effects of mobilized eolian sand on soil formation in Peoria loess, south-central Nebraska, USA: Nebraska Academy of Sciences Annual Meeting, Lincoln, Nebraska.

2019

Christner, Claire. A GEOGRAPHICAL ANALYSIS OF MEDICAID EXPANSION POLITICS IN NEBRASKA. Nebraska GIS / LIS Symposium. LaVista, Nebraska.

Christner, Claire. A GEOGRAPHICAL ANALYSIS OF MEDICAID EXPANSION POLITICS IN NEBRASKA. Student Research Day – UNK.

Christner, Claire, Ingersoll, Rene, and Natasha Winfield, Natasha. USING GISCIENCE AND MARKETING GEOGRAPHY TO DEFINE THE MARKET AREA AND SEGMENT IN-HOME HEALTH CARE CUSTOMERS IN DES MOINES, IOWA. Student Research Day – UNK.

Combs, Tate. Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes Along with Other Facts about the Plains. UNK Student Research Day.

Farrier, Sean. PREDATION ON STOCKED WALLEYE AND WHITE BASS FINGERLINGS IN LAKE MCCONAUGHY. Nebraska GIS/LIS Symposium. LaVista, Nebraska.

Ingersoll, Rene. The Spatial Arrangement of Shinto Shrines. UNK Student Research Day.

Ingersoll, Rene, Christner, Claire, and Natasha Winfield. USING GISCIENCE AND MARKETING GEOGRAPHY TO DEFINE THE MARKET AREA AND SEGMENT IN-HOME HEALTH CARE CUSTOMERS IN DES MOINES, IOWA. Great Plains Rocky Mountain Division of the American Association of Geographers. Lawrence, Kansas.

Reinson, M.C., **P. R. Burger**, A. Little, N. Bickford, and D. H. Ranglack. HABITAT SELECTION OF WHITE-TAILED DEER IN AN AGRICULTURE DOMINATED ENVIRONMENT. The Wildlife Society Annual Meeting. Reno, Nevada.

Reinson, Miranda. HABITAT SELECTION OF WHITE-TAILED DEER (*ODOCOILEUS VIRGINIANUS*) IN SOUTH CENTRAL NEBRASKA. <u>Nebraska GIS/LIS Symposium</u>. LaVista, Nebraska.

Winfield, Natasha, Ingersoll, Rene, and Claire Christner. USING GISCIENCE AND MARKETING GEOGRAPHY TO DEFINE THE MARKET AREA AND SEGMENT IN-HOME HEALTH CARE CUSTOMERS IN DES MOINES, IOWA. <u>Nebraska GIS/LIS Symposium</u>. LaVista, Nebraska.

Winfield, Natasha. Spatial Examination of Nebraska's Pioneer and Heritage Farms. Student Research Day - UNK.

2020

Glause, Austin. Using GIScience and a Retail Gravity Model Estimation of Running Equipment Demand in Nebraska Using GIScience. Student Research Day-UNK.

Vrooman, Justin. If They Run, They Need Running Shoes: Using GIScience Locate-Allocate Models to Determine the Location of a Running Shoe Store in Nebraska. Student Research Day-UNK.

2021

Austin Glause and Justin Vrooman. Using GIScience to Understand Service Area Accessibility of Pediatric Weight Management Programs in Nebraska's Rural and Micropolitan Communities. Student Research Day - UNK. 2nd Place (tied) Behavioral and Social Science Division.

Justin Vrooman and **Austin Glause**. Market Area Delineation of a Pediatric Weight Management Program in Kearney, Nebraska Through GIScience. Student Research Day - UNK. 2nd Place (tied) Behavioral and Social Science Division.

Emma Raders and Paul R. Burger. A GIScience Assessment of Green Infrastructure on the University of Nebraska Campus. Nebraska Academy of Sciences. 1st Place General Biology Division.

Justin Vrooman and **Austin Glause**. Market Area Delineation of a Pediatric Weight Management Program in Kearney, Nebraska Through GIScience. Great Plains Rocky Mountain Division of the American Association of Geographers. Lincoln, Nebraska.

Han, J. Impact of COVID-19 on Nebraska Agriculture in 2020. Student Research Day, University of Nebraska-Kearney. Awarded First Prize in Professional and Applied Science.

Livengood, P. An Analysis of the Flood that Occurred in Kearney, Nebraska, in July 2019. Student Research Day, University of Nebraska-Kearney.

Livengood, P. An Analysis of the Flood that Occurred in Kearney, Nebraska, in July 2019. Nebraska Academy of Sciences, 2021.

Tate Combs. Leaves From my Journal William T. Beatty's Account of His Time in the 2nd Ohio Volunteer Cavalry. Student Research Day, UNK.

D. Geography Awareness Week

Additionally, national geography awareness week was created in 1987 to highlight geographic awareness and literacy among students and the general public. As part of its observance, UNK Geography hosts a scholar or practitioner to highlight the application of geography or geographic information. These forums have been well attended by the campus community and the public—the following list contains additional public presentations sponsored by the Geography Program.

Guest Speakers:

November 2016

UNK hosted Dr. Jed Roberts from the Oregon Department of Geology and Mineral Industries for Geography Awareness Week. Dr. Roberts' lecture title was *Applications of Airborne Lidar for Natural Hazard Mapping in Oregon*.

November 2017

Gary and Margaret Kraisinger discussed their 2015 award-winning book titled *The Western Cattle Trail 1874-1897* (another book project titled *The Shawnee-Arbuckle Trail, 1867-1870, the Predecessor to the Chisholm Trail to Ablilene, Kansas* was also discussed).

November 2018

Dr. Rex (RJ) Rowley is an Associate Professor of Geography in the Department of Geography, Geology and the Environment at Illinois State University presented **Place Geographies: A Global Exploration of a Sense of Place**.

November 2019

UNK's Department of Geography hosted Governor Pete Ricketts who presented *The Impacts of International Trade on Nebraskans: Observations from the Recent Nebraska Trade Mission to Vietnam* for Geography Awareness Week. Just prior to his UNK visit, Governor Ricketts traveled to Vietnam and Japan to promote Nebraska's agricultural products and pitch the state as a top destination for international investment. Governor Ricketts shared with UNK faculty and students, that during the trip members of the delegation met with officials from the Vietnamese government and urged them to work with the United States to expand trade and open new markets for Nebraska's agricultural products.

November 2020

No guest speaker due to COVID concerns.

November 2021

In 2021, the department welcomed Dr. Becky Buller from the School of Global Integrative Studies at the University of Nebraska-Lincoln. Dr. Buller is a cultural and historical geographer, with specialties in the Great Plains and American West, human trafficking in Nebraska, geographic education, and women and genders' studies. This year's presentation by Dr. Buller was titled **Nebraska National Forest, Human Trafficking, and Iceland: A Sampler in Channeling Geography's Superpowers to Dream Bigger and Affect Positive Change**. The presentation provided an overview of different themes where geography is playing an instrumental role in solving problems.

IV. INSTITUTIONAL CONTRIBUTIONS

The Geography Program contributes to a variety of programs on campus, including the General Studies Program. In addition to General Studies, the Geography Program supports a number of disciplines and programs across campus. Additionally, the Geography Program offers courses in support of the Honors Program, the Thompson Scholar Learning Community, and International Studies.

A. General Studies

Geography supports the General Studies Program by offering courses found in several categories, including Loper 7, Loper 8, Loper 9, and Loper 10. Loper 7 Social Science (104 World Regional, 106 Human Geography, 206 Geography of the United States and Canada). Loper 8 Natural Science (101 The Atmosphere, 102 The Lithosphere, 103 The Dynamic Planet: Hazards in the Environment, 201 Earth Science, 209, Meteorology). Loper 9 Civic Competency (323 Political Geography). Loper 10 Respect for Human Diversity (104 World Regional, 106 Human Geography, 206 Geography of the United States and Canada).

B. International Studies

Geography 104 (World Regional) is included in the International Studies Program, as are the previously listed Loper category classes found in the General Studies program. A number of geography courses, both upper and lower division, can be taken as electives in the International Studies major.

C. Thompson Scholars

The William H. Thompson Scholars Learning Community (TSLC) is a living/learning community for students who are awarded the Susan Thompson Buffett Foundation Scholarship at the University of Nebraska Kearney (UNK). The Thompson Learning Communities were initiated in 2008 at UNK, UNO, and UNL through a partnership between the University of Nebraska and the Susan Thompson Buffett Foundation; the learning communities are named in honor of William H. Thompson, the father of Susan Thompson Buffett. Students who choose to attend UNK become known as Thompson Scholars and automatically become part of the living/learning community. The Department of Geography has been associated with the Thompson Scholars program for a number of years and regularly schedules courses set aside for Thompson Scholar students.

D. Co-Curricular Activities—Gamma Theta Upsilon

During the 1920s, a professor at Illinois State University created the Alpha Chapter of Gamma Theta Upsilon, a professional geography fraternity. Interest gradually increased in developing a national organization for GTU. In the spring of 1931, charters were granted to four additional chapters. Since that time more the International Honor Society has grown to more than 200 chapters. UNK's Zeta Sigma chapter was re-established in 2009 and since that time seventy-six students have joined the honor society.

V. STUDENT PROFILE AND SUPPORT DATA

Information presented in this section reports on program-level data and includes student profile information, recruitment efforts, advising, and scholarships. UNK's *Factbook* provides data regarding Geography majors, minors, and graduates (degrees conferred) for the previous five years.

A. Student Data

Tables 1 & 2 demonstrate that the Geography Program has been steady in recent years. The number of majors has remained fairly constant, as has the number of students minoring in geography. The number of geography degrees conferred has ranged from one to four over the last five years.

Table 1—Geography Majors by Academic Year						
Year	2021-2022	2020-2021	2019-2020	2018-2019	2017-2018	
# of Majors	11	9	10	8	9	
5						
Table 2—Geograp	ohy Degrees Co	nferred				
Table 2—Geograp <u>Year</u>	hy Degrees Co 2021-2022	nferred 2020-2021	2019-2020	2018-2019	2017-2018	

B. Recruitment

Students who choose to become Geography majors at UNK most often make the choice when they are sophomores, juniors, or as transfer students. Rarely does a first-year student enter UNK with Geography as their declared major, which is typical for the discipline. Recruiting majors in the past has been a challenge, with most efforts focused on prospective students visiting campus who express an interest in Geography, high school recruitment fairs, promotion via the Department's web site, and hallway research posters and display cases in Copeland Hall. In introductory courses, faculty emphasize degree opportunities at UNK and the introductory geography courses as part of the General Studies Program provide the best opportunities for recruitment.

C. Advising

Advising of geography students is the responsibility of geography faculty. Each undergraduate is required to meet with their advisor prior to registering for the upcoming semester. Faculty advisors are responsible for becoming acquainted with advisees and going beyond just class scheduling, specifically, advisors are expected to help students achieve their academic and career goals.

D. Scholarships

Geography majors are eligible for four different geography scholarships in addition to Gamma Theta Upsilon and the CAS Honors Convocation. The four scholarships reserved for geography students are: Outstanding Geographer Scholarship, Future Geographer Scholarship, Riley & Rodney Oestreicher Scholarship, and the Recyclers Ecology Scholarship. Additionally, students who meet the minimum G.P.A. requirements are eligible to participate in Gamma Theta Upsilon (GTU). GTU is an International Honor Society for geography students founded in 1969. Since 2009, the local UNK chapter has had seventy-six students join the honor society. Finally, the CAS Honors Convocation is held during graduation week in the fall and spring semesters to honor outstanding students in the college.

VI. FACULTY MATTERS

The information in this section reflects the qualifications, achievements, and characteristics of the geography faculty.

A. Full-Time Geography Faculty

Currently, the Geography Program has five full-time faculty members as shown in **Table 3**. These faculty members are Dr. John Bauer, Dr. Vijay Boken, Dr. Paul Burger, Dr. Jason Combs, Dr. Jeremy Dillon, and Dr. Nate Eidem.

Name	Rank	Graduate Status	Highest	Awarding
			Degree	Institution
John Bauer	Professor	Х	Ph.D.	University of Kansas
Vijendra Boken	Professor	Х	Ph.D.	University of Manitoba
Paul Burger	Professor	Х	Ed.D.	Oklahoma State University
Jason Combs	Professor	Х	Ph.D.	University of Nebraska-Lincoln
Jeremy Dillon	Professor	Х	Ph.D.	University of Kansas
Nate Eidem	Adjunct Instructor		Ph.D.	Oregon State University

Table 3—UNK Full-Time Geography Faculty

During the last three years (2019, 2020, 2021), geography faculty have produced **sixteen** peerreviewed publications. Further, geography faculty have made **eighteen** presentations at professional conferences and invited lectures. Geography faculty have written **two** technical reports and have secured **six** grants and contracts with outside agencies during that time frame. Additional faculty achievements are found in **Appendix A**.

Recent Peer-Reviewed Publications

Bartee, Roderick, Heelan, Kate, **Burger, Paul**, Coughlin, Ava, and **Combs, H. Jason**. 2019. Spatial Analysis of Cancer Survivors' Accessibility to Exercise Programs Designed Exclusively for Their Needs. *The Pennsylvania Geographer* 57(2): 1-15.

Boken, V. 2019. Developing a weather-based index for crop insurance to promote sustainable agriculture and mitigate an agrarian crisis, a case study in India. Scientific Papers Series, Scientific Papers. Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering. Vol. VIII, 2019. pp. 109-113.

Boken, V. 2020. Satellite Data Based Soil Water Index as a Tool to Monitor Droughts and Agricultural Crisis—An Example of Yavatmal District, Maharashtra, India. *Remote Sensing of Land* 4(1-2): 12-18.

Boken, V. Assessing the Contribution of Drought to Farmer-Suicide Occurrence in Yavatmal District, Maharashtra, India. *The Geographer* 66(2).

Clarke MA, Qureshi S, Barone, T, Qi, Y, Windle JR, **Combs J**, **Burger P**. 2021. *An mHealth Approach to Addressing Health Inequity*. In: Kalra J., Lightner N.J., Taiar R. (eds) Advances in Human Factors and Ergonomics in Healthcare and Medical Devices. AHFE 2021.

Combs, H. Jason. 2021. "Selling" Nebraska through Archer King's Exaggeration Postcards. *Material Culture* 53(1): 79-101.

Combs, H. Jason and **Bratton, Jordyn.** 2018. Following the Rivers West: The 1852 Journal of John D. Randall. *Great Plains Traverse* 1(2): 4-27.

Combs, H. Jason and **Combs, Tate**. 2019. Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes Along with Other Facts about the Plains. *Nebraska History* 100(4): 220-235.

Combs, H. Jason, Burger, Paul, Sogar, Christina, Campbell, Julie, Wulf, Timbre, Maughan, Suzanne, and Jody Van Laningham. 2019. EMPLOYING GIS TO ADDRESS THE PERCEIVED NEEDS AND SERVICE USE AMONG YOUTH OFFENDERS PREPARING FOR REENTRY TO RURAL AND URBAN COMMUNITIES. *Papers in Applied Geography* 5(1-2): 119-125.

Combs, H. Jason, Winfield, Natasha, and **Paul R. Burger**. 2019. NEBRASKA'S PIONEER AND HERITAGE FARMS: A GEOGRAPHICAL AND HISTORICAL PERSPECTIVE. *Great Plains Quarterly* 39(1): 59-76.

Combs, H. Jason, and **Burger, Paul**. 2020. Nebraska's Medicaid Expansion: An Interesting Rural-Urban Divide. *The Geographical Bulletin* 61(1): 29-36.

Hollman, Angela K., Obermier, Timothy R., and **Paul R. Burger**. 2021. Rural Measures: A Quantitative Study of the Rural Digital Divide. *Journal of Information Policy*. 11:176-201.

Liew, HP., **Eidem**, N. Assessing the spatial-temporal clustering and health implications of fine particulate matter (PM2.5). *Journal of Public Health* (2020).

Liew, H.P. and **Eidem**, N. 2021. Examining the potential impacts of processes associated with urbanization and land use changes on inundation depths in areas affected by Hurricane Harvey in Houston. *Community Development*. pp. 1-13.

Liew, H.P. and **Eidem**, N. 2021. Examining the potential impacts of social vulnerability on damage levels in areas affected by Hurricane Harvey. *Journal of Homeland Security and Emergency Management*.

Wu, B., Ma, Z., **Boken, V**., Zeng, H., Shang, J., Igor, S., Wang, J. and Yan, N. 2022. Regional differences in the performance of drought mitigation measures in 12 major wheat-growing regions of the world. *Agricultural Water Management* 273 (2022)107888.

Recent Professional Lectures and Presentations

Bauer, John T. 2019. "The Changing Geographies of Advertising in Early Automobile Route Guides." Poster presented at the Annual Meeting of the American Association of Geographers, Washington, D.C.

Boken, V. Developing a weather-based index for crop insurance to promote sustainable agriculture and mitigate an agrarian crisis, a case study in India. Presented at Agriculture for life, life for agriculture, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania, June 6-8, 2019.

Burger, Paul R. 2019. A GISCIENCE APPROACH TO ANALYZING SPATIAL PATTERNS OF VOTER TURNOUT IN OMAHA, NEBRASKA. Great Plains Rocky Mountain Division of the Association of American Geographers. Lawrence, Kansas.

Combs. H. Jason. 2019. Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes along with Other Facts about the Plains. Great Plains Rocky Mountain Division—AAG. Lawrence, Kansas

Reinson, M.C., **P. R. Burger**, A. Little, N. Bickford, and D. H. Ranglack. 2019. HABITAT SELECTION OF WHITE-TAILED DEER IN AN AGRICULTURE DOMINATED ENVIRONMENT. The Wildlife Society Annual Meeting. Reno, Nevada.

Sogar, Christina, Maughan, Suzanne, Campbell, Julie, Van Laningham, Jody, Wulf, Timbre, and **Paul Burger.** 2019. UNDERSTANDING JUVENILE REENTRY: AN EVALUATION OF DETENTION STAFF PERCEPTIONS. Western Social Science Association Conference. San Diego, California.

Eidem, Nate and McGahan, Steve. 2019. 360 Degrees of Geography. Innovation in Pedagogy and Technology Symposium. University of Nebraska-Lincoln. Lincoln, Nebraska.

Eidem, Nate and McGahan, Steve. 2019. Panel Discussion on Kelly Fund Research. Innovation in Pedagogy and Technology Symposium. University of Nebraska-Lincoln. Lincoln, Nebraska.

Boken, V. 2020. Satellite Based Soil-Water Index as a Tool to Monitor Droughts and Agricultural Crisis—An Example of Yavatmal District, Maharashtra, India. eConference "Environmental Challenges, Problems, and Remedies." Yavatmal, Maharashtra, India.

John T. Bauer. "Visit NEBRASKAland: Tourism as Portrayed on Nebraska's Official State Highway Maps." Paper presented at the Great Plains/Rocky Mountain Division Annual Meeting, American Association of Geographers, Lincoln, Nebraska.

Burger, Paul, Glause, Austin, Vrooman, Justin, Heelan, Kate, and Todd Bartee. 2021. Using GIScience to Understand Service Area Accessibility of Pediatric Weight Management Programs in Nebraska's Rural and Micropolitan Communities. Great Plains Rocky Mountain Division of the American Association of Geographers. Lincoln, Nebraska.

Clarke, Martina A., Qureshi, Sajda, Barone, Timi, Qu, YI, Windle, John R., **Combs, Jason**, and **Paul R. Burger**. 2021. An mHealth Approach to Addressing Health Inequity. Applied Human Factors and Ergonomics (AHFE 2021 New York, July 2021).

Raders, Emma, **Burger, Paul** and Bryan Drew. A GIScience Assessment of Green Infrastructure on the University of Nebraska Campus. Nebraska Academy of Sciences. April 23, 2021.

Hollman, Angela, Obermier, Tim, **Burger, Paul** and Adam Spanier. 2021. Rural Measures: A Quantitative Study of the Rural Digital Divide. Research Conference on Communications, Information, and Internet Policy.

Boken, V. and Livengood, P. 2021. An analysis of flood occurred in Kearney in July 2019. Presented (virtually) at the annual meeting of Nebraska Academy of Sciences.

Boken, V. 2021. Droughts and Farmers Suicides – An example of Maharashtra, India. Invited Presentation at the virtual workshop organized by American Geophysical Union (AGU) and National Science Foundation. "Bringing land, ocean, atmosphere, and ionosphere data to the community for hazards alerts."

Jason Combs. "Selling" Nebraska through Archer King's Exaggeration Postcards Great Plains Rocky Mountain Division—AAG Lincoln, Nebraska.

Jason Combs. Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes Along with Other Facts about the Plains International Society for Landscape, Place, and Material Culture, Tulsa, Oklahoma.

Recent Technical Reports

Dillon, Jeremy. Phase 1 and 1A Geomorphological Investigation, Winterset, Iowa Regional Airport-Technical Report. Iowa Office of the State Archaeologist.

Bauer, A. and **Dillon, J.S.**, 2021. Archeological and Geomorphological Survey of the Douglas County Wetland Bank, Technical Report prepared for Felsburg, Holt & Ullevig, and Douglas County. Technical report submitted to the Nebraska State Historical Society Office of the State Archeologist.

Recent Grants and Contracts

Winterset Iowa Municipal Airport Study: \$4,963.2. Jeremy S. Dillon PI. Historic Resources Group, Inc.

2019-20 RSC Collaborative Grant: POLLEN, PLANT MACROFOSSILS, AND ANCIENT DNA: AN INTERDISCIPLINARY STUDY OF THE KEARNEY PALEOECOLOGY SITE. \$11,915.5 Jeremy S. Dillon PI, Bryan Drew (UNK) Eric Grimm (University of Minnesota) and Catherine Yansa (Michigan State University) Co-PIs.

Dr. Nate Eidem and Steven McGahan (eCampus) were awarded a Kelly Fund Award in support of on-line instruction at UNK (\$60,500 February 2018-June 2019).

\$150,000 University of Nebraska Collaboration Initiative Grant, July 2020-June 2022. *Spatial Analysis of Health Care Accessibility and Usage in Nebraska*. Qureshi, Sajda (UNO), **Burger, Paul** (UNK), **Combs, H. Jason** (UNK), Qi, Yi (UNL), Windle, John (UNMC), Barone, Timi (UNO), and Martina Clark (UNO).

University Collaborative Research Stimulation Program, **Nathan Eidem** and Mary Harner, \$3,980.55, May 1, 2019 – May 31, 2021.

VII. RESOURCE BASES

The information in this section includes insight into resources for the Geography Program, such as, financial and library resources.

A. Financial Resources

The Geography Program operates on a modest budget. The non-personnel operating budget is \$10,919 and covers the cost of office expenses, including paper, phone, photocopy lease, office supplies, telephone bill, and a portion of an office work study. The non-personnel operating budget is supported by a capital budget of \$4,500. When funds have been carried forward the resources have been used to replace outdated items such as scanners, printers, and laboratory equipment. Additional financial support has been available from CAS, outside contracts and indirect money from outside grants to support travel, purchase hardware and software, and assist in the acquisition of laboratory equipment.

B. Library Resources

This Library report provided for the Academic Program Review of the Geography Department was prepared by Jenny Haddon, Processing and Outreach Archivist/Assistant Professor, August 2022. The report provides general information about the Calvin T. Ryan Library, as well as specific Library resources and services which support the Geography Department.

Library Mission and Vision Statement

Mission: The Calvin T. Ryan Library supports the mission of the University of Nebraska at Kearney by acquiring and organizing resources, providing collaborative assistance and instruction in support of scholarly teaching, learning and research, meeting information needs, and adhering to recognized standards of Library practice.

Vision: The University of Nebraska at Kearney will achieve national distinction for a high quality, multi-dimensional learning environment, engagement with community and public interests, and preparation of students to lead responsible and productive in an increasingly diverse, interconnected, interdependent, and technological society.

Facilities and General Statistics

The Library's primary clientele are UNK students, faculty and staff. All members of the UNK community may access the Library's electronic resources from both on or off-campus. Students from other units of the University of Nebraska, or from State Colleges, are classified as reciprocal borrowers and may check out Library materials. The Library is also open for public use. Nebraska citizens may acquire a Special Borrower's card free of charge. Special Borrowers can check out up to five items, and also have access to the Library's electronic resources on a "walk in" basis only.

The Library's services and collections are based in the Calvin T. Ryan Library, which was built in 1963 and expanded in 1981-82 to its present size. The Library building is open 89.5 hours per week with statistics showing heavy use. There are more than 19,000 visitors per month on average, for a counted total of more than 1,835,000 persons entering the facility since 2011. In

Fiscal Years 2014 to 2021, there were 6,877 scheduled events held in the Library, with 69,803 attendees. Scheduled events include instruction by faculty librarians, classes taught by outside faculty and staff, and scheduled events for the Learning Commons, but they do not include unscheduled informal use by students, staff and faculty or individual tutoring or Writing Center appointments.

The Library offers study and classroom seating to accommodate over 1,100 Library users. Group study rooms, individual study carrels, tables, comfortable seating, photocopying and scanning facilities, three instructional computer labs, and a coffee shop are some of the amenities available within the Library to support research and curriculum needs. The Learning Commons, which includes Academic Peer Tutoring and the Writing Center, is located on the Library's second floor. The Library is also home to the Honors Program and offices for Independent Research and Creative Activity.

Over 160 desktop and laptop computers are available to Library users. These computers are equipped with a full suite of productivity applications. In addition, computers in the West Lower Level Lab have SPSS, Mathematica, R, Matlab, and other specialized software for general use. Media production applications are also available on select computers. Access to the University's secure wireless network is available; guest access to wireless is available for those who are not affiliated with the University.

The Library also makes available equipment for checkout, including 56 laptops, microphones, tripods, and other materials.

Staff Information

The Library has 23 employees. In addition to the Dean, the Library includes 7 Library faculty members, 7 professional staff, and 8 support staff positions. The Library also employs several student workers.

Library faculty members are assigned to liaise with specific academic departments and programs. These liaison assignments are posted on the Library's website. The librarian liaison works with faculty members of the academic department to identify resources to add to the Library's collections. In addition, the librarian liaison offers instructional classes to the department, to increase awareness of Library resources, improve information literacy, and enhance scholarship. The librarian liaison also maintains online research guides to assist faculty and students in navigating Library resources related to that discipline. Research assistance from the librarian liaison is also available through email, online appointments, telephone, and inperson consultations.

Budget

University Administration allocates state funds and tuition revenue in setting the Library's budget, which is augmented by the Student Library Enhancement Fee. Faculty input from academic departments and programs is sought in purchasing decisions so that the Library's collections align with the research and curriculum needs of the University faculty.

Overall Library budget for FY 2021-2022:

One-time purchases (books, serial backfiles): \$39,477 E-books: \$11,894 Subscription resources (databases): \$724, 010 Preservation/binding - \$304 Note: the above does not reflect all journal access, as much is provided through electronic databases.

Library Budget Allocations for the Geography Department

Historically, the Library allocated funds to departments based on the number of credit hours produced by the department in the previous academic year. However, for the past several years, Geography Department faculty members have been able to request purchase of materials, or that Library Collections focus on specific publishers or subject areas as needed. From January 2021-June 2022, the total amount of items requested by the department totaled \$422.

Most academic resources used by the department are available via database subscriptions, which totaled \$3,390 in FY2021-2022.

Collections

Periodicals

As of July 2021, over 100,000 periodical titles were available online to Library users via subscription databases and publisher e-journal packages. The Library also maintains approximately 150 current periodical subscriptions in print and about 5,100 volumes dating from the early 1900s forward.

Books, E-books, and DVDs

The Library's collections consist of 292,000 printed volumes; 781,000 ebooks; 59,000 media resources in physical formats; 92,000 online media resources; 6,300 print serials; and 81,000 ejournals. Physical resources are distributed across several different collections such as the main stacks, government documents, new books, graphic novels, and the juvenile literature and curriculum collections.

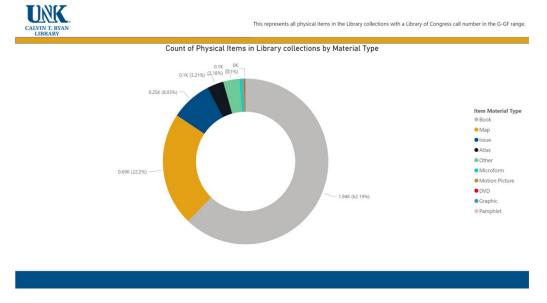
For the purposes of this report, the materials identified as relevant are those classified in the Library of Congress classification system as Geography, general (G), Mathematical Geography, Cartography (GA), Physical Geography (GB), Oceanography (GC), Environmental Sciences (GE) and Human Ecology (GF). The Library of Congress classification system is sometimes difficult to translate into specific programs because they are necessarily generic, therefore other subject areas relevant to Geography such as Political Science, Economics, Agriculture or Geology are not included in this report.

Within the library, multiple objects and material types are catalogued with call numbers related to Geography, as shown in Table 4 and Graph 1.

Physical Item	Count
Books	1933
Journal Issue	347
Maps	817
Visual Material	19

Table 4: Geography-related holdings as of July 2022

Graph 1: Count of Physical Items in Library Collections by Material Type



In addition to books held in the Library's print collection, many ebooks in the Geography subject areas are available, both through the Library's catalog and via databases. Because ebooks are spread across multiple collections, we are unable to provide an exact count for the purposes of this report.

Databases and E-Resources

The Library subscribes to 251 online databases, including multidisciplinary, full-text sources such as Academic Search Premier, Academic OneFile, and JSTOR. Subject-specific databases supporting the Geography Department include BioOne, GreenFILE, Natural Science Collection, Science & Technology Collection, World Bank Open Data and World Factbook. Table 5 shows recent usage statistics for some of these databases.

Database Name	2020	2021
BioOne	2650	2648
GreenFILE	2027	1434
Science & Technology Collection	3548	1604

Table 5: Calculation of Searches, Investigations and Requests for select databases

The Library also has subscriptions to two streaming video collections: Films On Demand and Kanopy. These resources provide online access to over 43,000 documentaries, instructional videos, and films.

Special Collections

The Library's collections include several specialized collections, including the University Archives and Special Collection, Government Documents, Curriculum Collection. Archival materials include documents, photographs, and realia related to the institution's history from its founding in 1905 through the present day. Graduate student theses and published documents from the departments that make up the University are also retained in the Archives. The Library's Special Collection includes about 2,500 cataloged items, mostly books, concerning the history of Nebraska, the Great Plains, and the American West. Items related to rural schools, including oral histories and photographs, are also being collected

Government Documents

The Library serves as a federal and state depository of government documents. It has been a selective depository of U.S. Government publications since 1962, with more than 275,000 federal publications in print and microform formats, and cataloged access to over 20,000 federal publications. As a Nebraska State Depository Library, Government Documents also contains about 17,000 state documents in print, microform and online formats.

Digital Repository

OpenSPACES is the campus's institutional repository. Research, scholarship, and creative works of faculty, students and staff are gathered, preserved, and shared with a global audience. OpenSPACES hosts several journals. OpenSPACES can also assist faculty with making their work – scholarship, creative activity, teaching materials, etc. - freely available while also respecting copyright.

Services

Learning Commons

The UNK Learning Commons is a collaboration of the CTR Library and the Division of Student Affairs. Located on the second floor of the Library the Learning Commons centralizes academic support services to foster student confidence and independence in a collaborative learning

environment. Programs offered in the Learning Commons are subject tutoring, language tables, supplemental instruction, and the Writing Center.

Reference / Research Assistance

Research assistance from Library faculty is available in-person, by telephone, appointment, email, text, and online chat. Ask a Librarian is the central portal for research assistance services.

Course Reserves

Faculty may place course reserve materials at the Library's circulation desk for students to access. Electronic reserves provide 24-7 online access to supplemental readings via the Library's e-reserves system. Physical reserves may include personal copies or Library copies of books, videos, CDs, or other materials.

Library Instruction

Library instruction is a service provided by librarian liaisons to each academic department and program. Since Spring 2022, Professor Jenny Haddon, Processing and Outreach Archivist, has been the librarian liaison to the Geography Department.

Library instruction sessions are available for any Geography course upon request. In addition, the Library Research Tutorial is available via Canvas for all faculty. The online tutorial allows students to broaden their familiarity with Library resources and learn basic information literacy skills at their own pace and with the benefit of online assessments, outside of scheduled classroom instruction time.

Professor Haddon has developed and maintained several online research guides to assist students. Guides can be requested for specific classes. The general guide for Geography is accessible at <u>https://guides.Library.unk.edu/geog</u>, and provides links to recommended databases and reference works as well as resources on citing sources.

InterLibrary Loan/Document Delivery

The Library offers an interLibrary loan/document delivery (ILL/DD) service to all UNK faculty, students, and staff to support their research and instructional needs. Books, microforms, journal or magazine articles, government documents, musical scores, and other items not owned by the Calvin T. Ryan Library may be requested from other libraries through InterLibrary Loan. Document delivery is a service by which Library-owned materials are made available to distance learning students. The Library pays for the costs of requesting and shipping materials associated with ILL/DD service. This service expands faculty and student access to materials which the Library does not own.

Open Education Resources

The University of Nebraska is committed to student affordability by supporting faculty in adopting free or reduced cost digital course materials in their courses. Faculty are encouraged to go to the Open Nebraska (ONE) website and use the available resources. Calvin T. Ryan librarians are available to assist faculty in this process. Since the UNK initiative began in 2015, students in 83 courses have saved nearly half a million dollars. Beginning with the Spring 2022 semester, campuses at the University of Nebraska will pilot an OER new course attribute for the searchable web-based course schedules.

VIII. PROGRAM COMPARISONS

This section gives an overview of Geography Programs at similar peer institutions as defined by the University of Nebraska system (Table 6). Of the ten schools listed, nine offer undergraduate degrees in geography and five offer graduate programs. Of the peer programs, Northern Michigan has the greatest number of majors at 293 and also the highest number of faculty at 12 (Murray State has 10 faculty and Northern Iowa has 9 but is currently looking to fill 2 more faculty lines).

Institution	BA/BS	Master's	Faculty	Majors
Central Arkansas	Yes	Yes	6	46/22
Central Missouri	No	No	4	*
MN-Moorhead	Yes	No	6	5
Murray State	Yes	Yes	10	*
Northern Colorado	Yes	No	8	48
Northern Iowa	Yes	Yes	9	41
Northern Michigan	Yes	No	12	293
Sam Houston State	Yes	Yes	9	60/35
Western Illinois	Yes	Yes	3	22/25
Wisconsin-S.P.	Yes	No	3	15

Table 6—Peer Institution Data

Our peer institutions reflect an interesting mix of degree programs, majors and minors along with graduate programs. GIS is emphasized and central to offerings at our peer institutions as is environmental science, anthropology, and planning/urban planning.

*Central Arkansas currently has six full-time faculty, with 46 undergraduate majors and 22 graduate students. The majority of undergraduate students emphasize urban planning and environmental science, while all of the master's level students are concentrating on GIS.

*Minnesota-Moorhead offers a BA/BS in geography with six faculty—two with specialties in geology, three with specialties in anthropology, and one in geography. They also offer a BS degree option with an emphasis in Geographical Science.

*Murray State offers a BS degree in Earth and Environmental Sciences following five tracks: Archaeology, Earth Science Secondary Certification, Environmental Science, Geography and GIS, and Geology. Murray State also offers eight minors: Anthropology, Archaeology, Earth Science, Environmental Geology, GIS, Globalization and Development, and Sustainability Studies, in addition to a GIS certification option.

*Northern Colorado offers a degree in Geography with five concentration areas: community development concentration, field studies concentration, GIS concentration, regional studies concentration, and secondary teaching concentration. Northern Colorado also offers three minors: environmental studies, geography, and GIS.

*The University of Northern Michigan went through a name change ten years ago. The chair referred to it as "rebranding." Switching from the Department of Geography to the Department of Earth, Environmental and Geographical Sciences. Same department, not a result of merging other departments.

*Sam Houston State University currently has 60 undergraduate majors pursuing one of two concentrations—environment, culture and development or GIS. They also offer minors in GSS (geospatial science), geography, and environmental studies. Sam Houston State University also has 35 graduate students in Applied GIS. They also offer undergraduate and graduate certificates in Applied GIS.

*Western Illinois is in an interesting situation with more graduate students (25) than undergraduate students (22). They offer an undergraduate degree in GIS with two options— (1) Geospatial and (2) Geoenvironment and Planning. Western Illinois also offers a Master's degree in GIScience.

IX. FUTURE DIRECTIONS

The program's future success lies in the department's ability and the administration's support to promote the discipline within the UNK campus community and to support our recruitment efforts as well. Geography has much to offer and by highlighting the functionality and utility of the discipline, the program prepares students for graduate school and/or employment in business and industry. Our recent graduates and their career paths are proof of the value of a UNK Geography degree to both students and society. Our students' stories are a central part of the department's story, and these stories should be promoted and celebrated (Appendix B).

The Geography Program is committed to offering undergraduate degrees as well as supporting graduate programs, in addition to maintaining its important contributions to UNK's General Studies Program as well as expanding the department's offerings—Earth Science (201) and Meteorology (209) have both been recently added and Environmental Conservation (305) and International Tourism (350) are both under consideration as courses to be added to the General Studies Program as well. Additionally, in recent years, many geography courses were renumbered and cross listed as graduate/undergraduate offerings—Water Resources (400/800), Cartography (409/809), Geographical Techniques and Thought (410/810), Applications of GIScience (416/816), GIScience Principles and Concepts (417/817), Working with GIScience and Spatial Analysis (418/818), and Remote Sensing of the Environment (419/819)—which allows the department to serve graduate students from other programs—exercise science and biology, for instance. We look forward to continuing and expanding our graduate offerings.

In regard to the General Studies Program, however, the department does have concerns. Loper categories, which should be limited to specific disciplines, have been "flooded" with courses by departments outside of those disciplines which limits geography's exposure and ability to recruit students. Without exposure in introductory courses students often do not realize that Geography exists, let alone see the discipline's value, application, and utility.

Appendix A—Abbreviated Geography Faculty CVs

John T. Bauer, Ph.D.

Department of Geography University of Nebraska at Kearney 203 Copeland Hall Kearney, NE 68849 (308) 865-8682 bauerjt@unk.edu

EDUCATION

Ph.D. in Geography, University of Kansas, Lawrence, August 2006
M.A. in Geography, University of Kansas, Lawrence, August 2001
B.S. in Cartographic Science, Southwest Missouri State University, Springfield, May 1998
A.S. in Pre-Engineering, Waubonsee Community College, Sugar Grove, Illinois, May 1995

EMPLOYMENT

Professor of Geography, 2016 – present **Associate Professor of Geography**, 2011 – 2016 **Assistant Professor of Geography**, 2006 – 2011 **Member, Graduate Faculty**, 2010 – present **Faculty Development Fellowship**, Spring 2014 **Tenured**, 2012

Courses Taught: World Regional Geography Map Investigation Cartography Geography of the United States & Canada Principles of Geographic Information Systems

RESEARCH INTERESTS

Thematic: History of cartography; Geographic Information Systems Historical geography: settlement geography; historical geography of transportation Cultural geography: geography of religion; cultural landscapes

Regional: United States - Midwest & Great Plains

SCHOLARLY AND PROFESSIONAL ACTIVITY

BOOK CHAPTER – IN PRINT

2016. John T. Bauer. "A Geography of Religion in the Great Plains" Just Plains Folks: Studies of the People of the Great Plains. Joan M. Blauwkamp, ed. Kearney: University of Nebraska Kearney. 50-61.

REFEREED PUBLICATIONS – IN PRINT

- 2015. Paul Burger, H. Jason Combs, and **John T. Bauer**. "Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis" *Papers in Applied Geography*. 1(4): 373-382.
- 2015. John T. Bauer. "1733 Miles from Where? Kearney, Nebraska's 1733 Identity" *Nebraska History*. 96(2): 66-73.

BOOK REVIEWS

- 2019. John T. Bauer. "Introduction to Human Geography Using ArcGIS Online" by J. Chris Carter. *Cartographic Perspectives* 93: 96-98.
- 2018. John T. Bauer. "Touring the West with Leaping Lena, 1925" by W.C. Clark, edited by David Dary. *Great Plains Quarterly* 38(3): 319.

INVITED SPEAKER

- 2018. **John T Bauer**. "Navigating Without Road Maps: The Early Business of Automobile Route Guide Publishing in the United States" Paper presented at the <u>49th Annual South</u> <u>Dakota State Geography Convention</u>, Brookings, South Dakota. March 16.
- 2017. **John T Bauer**. "1,733 Miles from Where? Kearney, Nebraska's 1733 Identity" Nebraska State Historical Society Brown Bag Lecture Series, Kearney, Nebraska. November 8.

CONFERENCE PRESENTATIONS

- 2021. John T. Bauer. "Visit NEBRASKAland: Tourism as Portrayed on Nebraska's Official State Highway Maps" Paper presented at the <u>Great Plains/Rocky Mountain Division</u> <u>Annual Meeting</u>, American Association of Geographers, Lincoln, Nebraska.
- 2019. John T. Bauer. "The Changing Geographies of Advertising in Early Automobile Route Guides" Poster presented at the <u>Annual Meeting of the American Association of</u> <u>Geographers</u>, Washington, DC.

- 2018. John T. Bauer. "An Analysis of Advertising Revenue in Early Automobile Route Guides" Paper presented at the <u>Great Plains/Rocky Mountain Division Annual Meeting</u>, American Association of Geographers, Manhattan, Kansas.
- 2018. John T. Bauer, Claire M. Christner "A Geography of Advertising in Early Automobile Route Guides" Poster presented at the <u>Great Plains/Rocky Mountain Division Annual</u> <u>Meeting</u>, American Association of Geographers, Manhattan, Kansas.
- 2018. **John T. Bauer**, Claire M. Christner "The Geography of Advertising in Early Automobile Route Guides" Poster presented at the <u>Annual Meeting of the American Association of</u> <u>Geographers</u>, New Orleans, Louisiana.
- 2017. **John T. Bauer**. "Navigating Without Road Maps: The Early Business of Automobile Route Guide Publishing in the United States" Paper presented at the <u>28th International</u> <u>Cartographic Conference</u>, Washington, DC.
- 2017. John T. Bauer. "Mapping Nebraska's Settlement Frontiers" Poster presented at the Annual Meeting of the American Association of Geographers, Boston, Massachusetts.
- 2017. John T. Bauer. "Origins of Nebraska's Frontier Settlers" Paper presented at the <u>2017</u> <u>Great Plains Symposium</u>, Center for Great Plains Studies, University of Nebraska, Lincoln, Nebraska.
- 2016. John T. Bauer. "Origins of Nebraska's Frontier Settlers" Poster presented at the <u>Annual</u> <u>Meeting of the Association of American Geographers</u>, San Francisco, California.

UNDERGRADUATE STUDENT RESEARCH SUPERVISED

- 2019. Rene E. Ingersoll. John T. Bauer, mentor. "The Spatial Arrangement of Shino Shrines," Poster presentation at the 2019 Annual Student Research Days, UNK, Kearney, Nebraska. Poster won 3rd Place award for Behavioral & Social Sciences.
- 2018. Rene E. Ingersoll. John T. Bauer, mentor. "The Spatial Arrangement of Shino Shrines," Poster presentation at the 2018 Annual Fall Student Research Symposium, UNK, Kearney, Nebraska.
- 2017. Natasha Winfield. John T. Bauer, mentor. "The Transcontinental Airmail Route in Nebraska," Poster presentation at the 2017 Student Research Day, UNK, Kearney, Nebraska.
- 2016. Tanner Stark. John T. Bauer, mentor. "An Historical GIS of 1889 Grand Island, Nebraska" Poster presentation at the 2016 Student Research Day, UNK, Kearney, Nebraska.

SERVICE

PROFESSIONAL SERVICE

- 2014 2021. Book review editor. *Historical Geography* journal.
- 2021 present. Co-editor. *Historical Geography* journal.
- 2021. Conference session chair. "Cultural Geography" at the 2021 <u>Great Plains/Rocky Mountain</u> <u>Division Annual Meeting</u>, American Association of Geographers, Lincoln, Nebraska
- 2018. Conference session chair. "Cultural Geography" at the 2018 <u>Great Plains/Rocky Mountain</u> <u>Division Annual Meeting</u>, American Association of Geographers, Manhattan, Kansas.
- 2018. Conference session chair. "Building a 21st Century Park" at the 2018 Great Plains Symposium, Center for Great Plains Studies, University of Nebraska, Kearney, Nebraska.
- 2017. Paper session chair. "Water" at the 2017 Great Plains Symposium, Center for Great Plains Studies, University of Nebraska, Lincoln, Nebraska.
- 2015. Conference program chair. <u>Great Plains/Rocky Mountain Division Annual Meeting</u>, Association of American Geographers, Kearney, Nebraska.
- 2015. Paper session organizer and chair. "Historical Geographies of the Central Plains" at the Annual Meeting of the Association of American Geographers, Chicago, Illinois.

Manuscript reviewer for Historical Geography; Geographies of Religions and Belief Systems; Journal of Cultural Geography; Material Culture; Great Plains Research; Southeastern Geographer; Professional Geographer; UNK Undergraduate Research Journal; UNK Graduate Review journal; Oxford University Press

UNIVERSITY SERVICE

- 2013 2016 Member, Board of Governors, Center for Great Plains Studies, UNL
- 2010 2012 Member, Nominating Committee, Center for Great Plains Studies, UNL
- 2014 2021 Member, UNK Graduate Council
- 2016 2021 Chairperson, UNK Graduate Council Faculty & Student Affairs Committee
- 2008 2011 Member, Undergraduate Research Council, University of Nebraska at Kearney
- 2021 2023 Member, UNK Faculty Senate
- 2021 2023 Member, UNK Faculty Senate Artists & Lecturers Committee
- 2021 present Member, UNK Assessment & Experiential Learning Advisory Committee

COLLEGE OF ARTS AND SCIENCES SERVICE

- 2018 2020 Member and Chair, College Advisory Committee
- 2021-2023 Member, College Advisory Committee

COLLEGE OF NATURAL AND SOCIAL SCIENCE SERVICE

- 2017 2018 Interim Faculty Associate to the Interim CNSS Dean, UNK
- 2011 2017. Member, College Oversight Committee, University of Nebraska at Kearney
- 2012 2013; 2014 2016. Chair of Oversight Committee

Vijendra K. Boken, Ph.D. Department of Geography University of Nebraska-Kearney Kearney, NE 68845, USA Phone: (308) 865 8357 Email: <u>bokenv1@unk.edu</u>

EDUCATION

Ph.D., Physical Geography (1999), University of Manitoba, Winnipeg, Canada. Dissertation: Prediction of Agricultural Drought for the Canadian Prairies Using Climatic and Satellite Data.

M.S., Water Resources Engineering (1993), University of Jodhpur, India (while employed with the Department of Space, India) Thesis: A Predictive Assessment of Agricultural Drought Using Climatic and Remotely Sensed Data

M.S., Agricultural Engineering (1985), Asian Institute of Technology, Bangkok, Thailand.

B.S., Agricultural Engineering (1983), G.B. Pant University of Agriculture and Technology, Pantnagar, India.

EMPLOYMENT

August 2007- Present	The University of Nebraska at Kearney, Nebraska, USA Department of Geography and Earth Science
	Aug. 2014 – Present: Professor Aug. 2009 – July 2014: Associate Professor Aug. 2007-July 2009: Assistant Professor
July 2004 – July 2007	The University of Mississippi, Oxford, Mississippi, USA
5	The University of Mississippi Geoinformatics Center Department of Geology and Geological Engineering (Visiting Assistant Professor, July 2004 – Aug. 2005)

TEACHING

I have taught both undergraduate as well as graduate courses in the past - Atmosphere (GEOG101, 4 hrs), Natural Hazards (GEOG 103, 3 hrs), Remote Sensing of Environment (GEOG317, 3 hrs), Water Resources (GEOG400, 3 hrs), Global Warming and Climate Change (GEOG188, 3 hrs, a portal course).

Students Research/Presentations:

Sharma, B. 2022 (Faculty advisor: V. Boken). Impact of Vaccination on the COVID-mortality Rate in the United States. Poster presented at Student Research Day held at University of Nebraska-Kearney, 31st March 2022.

- Livengood, P. 2021 [Faculty advisor: V. Boken]. An Analysis of the Flood that Occurred in Kearney, Nebraska, in July 2019. Poster presented at Student Research Day held at University of Nebraska-Kearney, March 31-April 1,2021
- Han, J. {Faculty advisor: V. Boken] 2021. Impact of COVID-19 on Nebraska Agriculture in 2020. Poster presented at Student Research Day held at University of Nebraska-Kearney, March 31-April 12021. Awarded First Prize.

Articles in Refereed Journals

Wu, B., Ma, Z., Boken, V., Zeng, H., Shang, J., Igor, S., Wang, J. and Yan, N. 2022. Regional differences in the performance of drought mitigation measures in 12 major wheat-growing regions of the world. *Agricultural Water Management* 273 (2022)107888.

Boken, V. 2020. Satellite Data Based Soil Water Index as a Tool to Monitor Droughts and Agricultural Crisis -An Example of Yavatmal District, Maharashtra, India. *Remote Sensing of Land*, 12-18.

Boken, V. 2020. Assessing the Contribution of Drought to Farmer-Suicide Occurrence in Yavatmal District, Maharashtra, India. *The Geographer* (Accepted, In Press).

Boken, V. 2019. Developing a weather-based index for crop insurance to promote sustainable agriculture and mitigate an agrarian crisis, a case study in India. Scientific Papers Series, Scientific Papers. Series E. *Land Reclamation, Earth Observation & Surveying, Environmental Engineering*. Vol. VIII, 2019. Print ISSN 2285-6064, CD-ROM ISSN 2285-6072, Online ISSN 2393-5138, ISSN-L 2285-6064, pp. 109-113.

Grants

Undergraduate Research Fellowships (\$1700; &1200 for students and \$500 for faculty) for the following students: Kyosuke Hara (2022-23), B. Sharma (2021-22), J. Han (2020-2021).

Invited Presentations

Boken, V. 2021. Droughts and Farmers Suicides, a case of Maharashtra, India. Presented at the virtual American Geophysical Union (AGU), National Science Foundation (NSF) workshop, "Bringing land, ocean, atmosphere, and ionosphere data to the community for hazards alerts" 24-28 May, 2021.

Boken, V. 2020. A few applications using satellite data and GIS. Invited presented at the international Webinar on Remote Sensing organized by National Institute of Technical Teachers' Training and Research, Bhopal, India, Oct 18, 2020.

Boken, V. 2020. Satellite Based Soil-Water Index as a Tool to Monitor Droughts and Agricultural Crisis – An Example of Yavatmal District, Maharashtra, India. Invited presentation at eConference "Environamental Challenges, Problems, and Remedies" Yavatmal, Maharashtra, India, June 12, 2020.

Boken, V. 2020. Education system in the United States: Personal observations and comparison with Indian System. Invited presentation at International Webinar on National Education Policy 2020 – Towards Holistic and Multi-disciplinary Education, organized by Mahamaya Government Degree Collecge, Lucknow, India, Aug 28, 2020.

Boken, V. 2018. Selected technologies for water conservation and sustainability. Invited lecture presented at the conference on Science, Technology, and Innovation in Water Management, New Delhi, 28th June, 2018.

Boken, V., Lal, K., Mukerjee, I., Yadav, R.K., and Singh, M. 2018. Deteriorating Groundwater Quality Causing Health Hazards in Selected Villages of Gautam Budh Nagar District, Uttar Pradesh, India. Annual conference, Great Plains and Rocky Mountain division of the Association of American Geographers, Oct. 5-6, 2018, Manhattan, KS.

Boken, V. and Amarnath, G. Examining the relationship among the satellite-based Soil Water Index, droughts, and crisis of marginalized farmers in Yavatmal district, Maharashtra, India. Annual Convention of the Indian Society of Agricultural Engineers (ISAE), Anand, Gujarat, India, January 8-10, 2018 [Abstract and full-length paper submitted, but not presented]

Papers or Posters Presented

Boken, V. and Livengood, P. 2021. An analysis of flood occurred in Kearney, Nebraska, in July 2019. Presented at the annual conference (virtual) of the Nebraska Academy of Sciences, April 23rd, 2021.

Boken, V. 2019. Developing a weather-based index for crop Insurance to promote sustainable agriculture and mitigate an agrarian crisis, a case study in India. Presented at the international conference, Agriculture for Life, Life for Agriculture, held at the University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania, June 6-8, 2019.

Boken, V. 2018. Selected technologies for water conservation and sustainability. Invited presentation at the conference on Science, Technology, and Innovation in Water Management, New Delhi, India.

Boken, V., Lal, K., Mukerjee, I., Yadav, R.K., and Singh, M. 2018. Deteriorating Groundwater Quality Causing Health Hazards in Selected Villages of Gautam Budh Nagar District, Uttar Pradesh, India. Annual conference, Great Plains and Rocky Mountain division of the Association of American Geographers, Oct. 5-6, 2018, Manhattan, Kansas.

SERVICE

Served as external Examiner for two Ph.D. students from Savitribai Phule Pune University, India, 2022. Member: Academic Affairs Committee, 2017

Editor, Geography Journal. I was selected and have been serving as an editor of the Geography Journal since 2012.

Editor, Journal of Geography, Environment and Earth Science International.

Book Reviews

Book Reviews: Reviewed a chapter of the book, Natural Hazards by Peter Abbotts, 10th edition in 2017.

PROFESSIONAL MEMBERSHIPS

Fellow of the Center of Great Plains Studies, University of Nebraska-Lincoln.

Association of American Geographers (ex-member) American Geophysical Union International Geographical Union International Association of Hydrological Sciences

IEEE Geosciences and Remote Sensing Society (ex-member)

PAUL R. BURGER

203A Copeland Hall(308) 865-8683Kearney, NE 68849burgerpr@unk.edu

EDUCATION —

Doctor of Education in Geography 1997 Oklahoma State University

Masters of Arts in Geography1994Kansas State University

Bachelor of Science in Geography 1992 Northwest Missouri State University

CURRENT POSITION

Professor of Geography2010 - PresentDepartment of Geography - University of Nebraska at Kearney
Courses taught:
Principles of GISWorld PopulationApplications of GISEconomic Geography
Political Geography
Human GeographyPolitical Geography
Democracy in Perspective

PUBLICATIONS (SINCE 2015)

Burger, Paul R., Combs, H. Jason, Qureshi, Sajda, Windle, John, Barone, Timi L, and Martina Clarke. 2021. Spatial Analysis of Health Care Accessibility and Potential Mobile Health Usage in Nebraska. Pennsylvania Geographer 59(2): 19-31.

Clarke MA, Qureshi S, Barone, T, Qi, Y, Windle JR, Combs J, Burger P. 2021. An *mHealth Approach to Addressing Health Inequity*. In: Kalra J., Lightner N.J., Taiar R. (eds) Advances in Human Factors and Ergonomics in Healthcare and Medical Devices. AHFE 2021. Lecture Notes in Networks and Systems, vol 263. Springer, Cham.

Hollman, Angela K., Obermier, Timothy R., and Paul R. Burger. 2021. Rural Measures: A Quantitative Study of the Rural Digital Divide. Journal of Information Policy.

Combs, H. Jason, and Paul R. Burger. 2020. *Nebraska's Medicaid Expansion: An Interesting Rural-Urban Divide*. <u>Geographical Bulletin</u> 61(1): 29-36.

Bartee, R. Todd, Burger, Paul R., Heelan, Kate A., Coughlin, Ava, and H. Jason Combs. 2019. *A Spatial Analysis of Cancer Survivors' Accessibility to Exercise Programs Designed Exclusively for Their Needs.* <u>Pennsylvania Geographer</u> 57(2): 1-15. **Combs, H. Jason, Burger, Paul, Sogar, Christina, Campbell, Julie, Wulf, Timbre, Maughan, Suzanne, and Jody Van Laningham.** 2019. *Employing GIS to Address the Perceived Needs and Service Use among Youth Offenders Preparing for Reentry to Rural and Urban Communities.* Papers in Applied Geography 5(1-2): 119-125.

Combs, H. Jason, Winfield, Natasha, and Paul R. Burger 2019. *Nebraska's Pioneer and Heritage Farms: A Geographical and Historical Perspective*. <u>Great Plains Quarterly</u> 39(1): 59-76.

Neal, Emma, Combs, H. Jason, and Paul R. Burger 2018. A Geographical Comparison of Death Penalty Politics in Nebraska. <u>Pennsylvania Geographer</u> 56(1): 1-14.

Pauley, Nicole M., Harner, Mary J., Brinkley Buckley, Emma M., Burger, Paul R., and Keith Geluso. 2018. Spatial Analysis of Borrow Pits along the Platte River in South-central Nebraska, USA, in 1957 and 2016. Transactions of the Nebraska Academy of Sciences and Affiliated Societies. 38:36-46.

Sydow, Spencer, Combs, H. Jason, and Paul R. Burger. 2017. *Treasure Hunt Geography: Buying and Selling the History of Kansas Along U.S. Highway 36.* <u>Illinois Geographer</u> 59(1): 47-66.

Burger, Paul R., and Kimberly D. Cooper. 2017. *A GIS-Based Market Location Study of a Veterinary Clinic in South Carolina*. In <u>Location Intelligence Research and Applications</u>. Murray D. Rice, and Tony Hernandez, editors. Kent, Ohio: Applied Geography Conference.

Chloupek, Brett, Burger, Paul, Combs, H. Jason, Pauley, Nicole, and Fletcher Sheridan. 2016. If You Build It Will They Come? Using GIScience to Estimate Retirement *Community Demand and Evaluate Potential Locations in Salt Lake City, Utah.* <u>Illinois</u> <u>Geographer</u> 58(2): 1-18.

Taylor, Kaitlyn, Combs, H. Jason, and Paul R. Burger. 2016. A GIScience Approach to Analyzing Spatial Patterns of Voter Turnout in Omaha, Nebraska. <u>Geographical Bulletin</u> 57(2): 99-114.

Burger, Paul R., Combs, H. Jason, and John T. Bauer. 2015. Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis. Papers in Applied Geography 1(4): 373-382.

PROFESSIONAL PAPERS (SINCE 2015)

Burger, Paul R., Glause, Austin, Vrooman, Justin, Heelan, Kate A., and Todd R. Bartee. 2021. Using GIScience to Understand Service Area Accessibility of Pediatric Weight Management Programs in Nebraska's Rural and Micropolitan Communities. <u>Great Plains Rocky</u> <u>Mountain Division of the American Association of Geographers.</u> (poster) Lincoln, NE.

Clarke, Martina A., Qureshi, Sajda, Barone, Timi, Qu, YI, Windle, John R., Combs, Jason, and Paul R. Burger. 2021. An mHealth Approach to Addressing Health Inequity. <u>Applied</u> <u>Human Factors and Ergonomics.</u> AHFE 2021 New York, July 2021.

Raders, Emma, and **Paul R. Burger.** 2021. A GIScience Assessment of Green Infrastructure on the University of Nebraska Campus. <u>Nebraska Academy of Sciences</u>. April 23, 2021.

Hollman, Angela, Obermier, Tim, Burger, Paul and Adam Spanier. 2021. Rural Measures: A Quantitative Study of the Rural Digital Divide. <u>Research Conference on Communications,</u> <u>Information, and Internet Policy.</u>

Hollman, A., Obermier, T., Burger, P. and Spanier, A. (Oct 29, 2020). Rural Measures: A quantitative study of the rural digital divide. <u>Nebraska Governance and Tech Center (NGTC)</u> <u>Digital Divide Roundtable.</u> Presenter at roundtable discussion. Informal proceeding with draft papers circulated for peer review. Roundtable discussion disseminated here in audio: <u>https://ngtc.unl.edu/digital-divide.</u>

Burger, Paul R. 2019. A GIScience Approach to Analyzing Spatial Patterns of Voter Turnout in Omaha, Nebraska. <u>Great Plains Rocky Mountain Division of the Association of American</u> <u>Geographers.</u> (poster) Lawrence, KS.

Reinson, M.C., P. R. Burger, A. Little, N. Bickford, and D. H. Ranglack. 2019. *Habitat* Selection of White-Tailed Deer in an Agriculture Dominated Environment. <u>The Wildlife Society</u> <u>Annual Meeting</u>. Reno, NV.

Sogar, Christina, Maughan, Suzanne, Campbell, Julie, VanLaningham, Jody, Wulf, Timbre, and Paul Burger. 2019. Understanding Juvenile Reentry: An Evaluation of Detention Staff Perceptions. Western Social Science Association Conference. San Diego, CA.

Burger, Paul, Combs, Jason and Brett Chloupek. 2018. *If You Build It Will They Come?* Using GIScience to Estimate Retirement Community Demand and Evaluate Potential Locations in Salt Lake City, Utah. Association of Pacific Coast Geographers. Reno, NV.

Coughlin AT, Bartee RT, Heelan KA, and Burger PR. 2018. *Analysis of Cancer Survivor's Accessibility to Exclusively Tailored Exercise Programs in Nebraska*. <u>American College of Sports Medicine</u>. Minneapolis, MN.

Wright, M., McCartney, S., Burger P., Tornberg, R., Soppela, J., and N. Bickford. 2017. Using GIS for Habitat Comparisons: A Case Study with Northern Goshawks. NASA Nebraska Space Grant: Nebraska Academy of Sciences. (poster) Lincoln, NE.

Combs, H. Jason, and Paul Burger. 2016. *Treasure Hunt Geography: Buying and Selling the History of Kansas Along U.S. Highway 36*. <u>Great Plains Rocky Mountain Division of the Association of American Geographers.</u> (poster) Colorado Springs, CO.

Burger, Paul R., Combs, H. Jason, and John T. Bauer. 2015. *Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis*. <u>Applied Geography Conference</u>. San Antonio, TX.

Taylor, Kaitlyn, Combs, H. Jason, and Paul Burger. 2015. *Generational Political Patterns: The Case Study of Presidential Election Results in Kearney, Nebraska*. <u>Great Plains Rocky</u> <u>Mountain Division of the Association of American Geographers.</u> (poster) Kearney, NE.

INVITED LECTURES AND PRESENTATIONS (SINCE 2015)

Burger, Paul R. *GIScience Applications in Health and Exercise Science*. PE 107: Introduction to Exercise Science, University of Nebraska-Kearney, Kearney, NE. Spring 2019.

GRANTS AND CONTRACTS RECEIVED (SINCE 2015)

Qureshi, Sajda, Burger, Paul R., Combs, H. Jason, Qi, Yi, Windle, John, Barone, Timi L., and Martina Clarke. *Spatial Analysis of Health Care Accessibility and Usage in Nebraska*. University of Nebraska Collaboration Initiative Grant. Summer 2020: \$150,000.

Sogar, Christina, Campbell, Julie, Wulf-Ludden, Timbre, Maughan, Suzanne, Van Laningham, Jody, and Paul Burger. *Perceived needs and service use among youth offenders preparing for reentry to rural and urban communities in Nebraska.* UNK: Research Services Council–Fall 2015: \$12,639.

GRADUATE STUDENT COMMITTEES (SINCE 2015)

Farrier, Sean. In progress. *Walleye (Sander Vitreus) and White Base (Morone Chrysopos) Stock Mortality Assessment.* Department of Biology.

Frisch, William. In progress. Department of Biology.

Forrester, Ashley. 2022. *Blanding's Turtles from the Western Sandhills of Nebraska*. Department of Biology.

Meier, Alyssa. 2021. Effects of Hunter Movement and Habitat use on Observation Rate of White-Tailed Deer (Odocoileus Virginianus). Department of Biology.

Reinson, Miranda. 2019. Influences of Habitat Fragmentation and Agriculture on White-Tailed Deer (Odocoileus Virginianus) Density and Habitat Selection. Department of Biology.

Coughlin, Ava 2018. An Analysis of Cancer Survivor's Accessibility to Exercise Programs Designed Exclusively for Their Needs in Nebraska, USA. Department of Kinesiology and Sports Sciences.

STUDENT RESEARCH MENTORED (SINCE 2015)

Vrooman, Justin 2022. *GIScience and Redistricting: A Local Government Case Study in Nebraska*. <u>Student Research Day - UNK.</u> Kearney, NE.

Glause, Austin and **Justin Vrooman**. 2021. Using GIScience to Understand Service Area Accessibility of Pediatric Weight Management Programs in Nebraska's Rural and Micropolitan Communities. <u>Student Research Day - UNK</u>. Kearney, NE (poster presentation). 2nd Place (tied) Behavioral and Social Science Division.

Vrooman, Justin and **Austin Glause**. 2021. *Market Area Delineation of a Pediatric Weight Management Program in Kearney, Nebraska Through GIScience*. <u>Student Research Day -</u> <u>UNK.</u> Kearney, NE. 2nd Place (tied) Behavioral and Social Science Division. **Raders, Emma,** and **Paul R. Burger.** 2021. A GIScience Assessment of Green Infrastructure on the University of Nebraska Campus. <u>Nebraska Academy of Sciences</u>. April 23, 2021. 1st Place General Biology Division.

Vrooman, Justin, and **Austin Glause**. 2021. *Market Area Delineation of a Pediatric Weight Management Program in Kearney, Nebraska Through GIScience*. <u>Great Plains Rocky Mountain</u> <u>Division of the American Assocation of Geographers</u>. Lincoln, NE.

Glause, Austin. 2020. Using GIScience and A Retail Gravity Model Estimation of Running Equipment Demand in Nebraska Using GIScience. <u>Student Research Day - UNK.</u> Kearney, NE.

Vrooman, Justin. 2020. *If They Run, They Need Running Shoes: Using GIScience Locate-Allocate Models to Determine the Location of a Running Shoe Store in Nebraska*. <u>Student</u> <u>Research Day - UNK.</u> Kearney, NE.

Ingersoll, Rene, Christner, Claire, and Natasha Winfield. 2019. Using GIScience and Marketing Geography to Define the Market Area and Segment In-Home Health Care Customers in Des Moines, Iowa. Great Plains Rocky Mountain Division of the American Association of Geographers. Lawrence, KS.

Reinson, M.C., P. R. Burger, A. Little, N. Bickford, and D. H. Ranglack. 2019. *Habitat Selection of White-Tailed Deer in an Agriculture Dominated Environment*. <u>The Wildlife Society</u> <u>Annual Meeting</u>. Reno, NV.

Farrier, Sean. 2019. *Predation on Stocked Walleye and White Bass Fingerlings in Lake McConaughy*. <u>Nebraska GIS / LIS Symposium</u>. LaVista, NE.

Reinson, Miranda. 2019. *Habitat Selection of White-tailed Deer (Odocoileus Virginianus) in South Central Nebraska*. <u>Nebraska GIS / LIS Symposium.</u> LaVista, NE.

Winfield, Natasha, Ingersoll, Rene, and Claire Christner. 2019. Using GIScience and Marketing Geography to Define the Market Area and Segment In-Home Health Care Customers in Des Moines, Iowa. Nebraska GIS / LIS Symposium. LaVista, NE.

Christner, Claire, 2019. *A Geographical Analysis of Medicaid Expansion Politics in Nebraska*. <u>Nebraska GIS / LIS Symposium.</u> LaVista, NE.

Christner, Claire, Ingersoll, Rene, and **Natasha Winfield, Natasha.** 2019. Using GIScience and Marketing Geography to Define the Market Area and Segment In-Home Health Care Customers in Des Moines, Iowa. <u>Student Research Day - UNK.</u> Kearney, NE.

Christner, Claire. 2019. *A Geographical Analysis of Medicaid Expansion Politics in Nebraska*. <u>Student Research Day - UNK.</u> Kearney, NE.

Coughlin, Ava. 2018. An Analysis of Cancer Survivor's Accessibility to Exclusively Tailored Exercise Programs in Nebraska. <u>Student Research Day - UNK.</u> Kearney, NE. – 1st Place Graduate Student Division.

Gosnell, Conner. 2018. Locating a Community Garden Using GIScience in Omaha's Food Desert. <u>Student Research Day - UNK.</u> Kearney, NE. – 3rd Place Behavioral and Social Science.

Neil, Emma. 2018. *Nebraska's Death Penalty: For or Against*. <u>Student Research Day -</u> <u>UNK.</u> Kearney, NE.

Winfield, Natasha. 2018. *Spatial Examination of Nebraska's Pioneer and Heritage Farms*. <u>Student Research Day - UNK.</u> Kearney, NE.

Trey Ertmer, Nathan Moore, David Urban, Ben Wagner. 2017. A GIScience Location-Allocation of a National Weather Service (NWS) Radar Tower in the Great Plains. <u>Student</u> <u>Research Day - UNK.</u> Kearney, NE.

Nicole Pauley. 2017. A GIScience Assessment of Land-Use Changes Along the Big Bend Region of the Central Platte River Floodplain from 1957-2016. <u>Student Research Day - UNK</u>. Kearney, NE.

Nicole Pauley. 2017. A GIScience Assessment of Land-Use Changes Along the Big Bend Region of the Central Platte River Floodplain from 1957-2016. <u>Nebraska GIS/LIS Symposium</u>. La Vista, NE. – 1st Place.

Ben Wagner, Allen Chlopek, Justice Mott and Spencer Sydow 2017. *A GIScience Site* Selection of a Nebraska Community College. <u>Nebraska GIS/LIS Symposium</u>. La Vista, NE. – 3rd Place.

Trey Ertmer, Nathan Moore, David Urban, Ben Wagner. 2017. A GIScience Location-Allocation of a National Weather Service (NWS) Radar Tower in the Great Plains. <u>Nebraska</u> <u>GIS/LIS Symposium.</u> La Vista, NE.

Ben Wagner, Allen Chlopek, Justice Mott and Spencer Sydow 2017. *A GIScience Site Selection of a Nebraska Community College*. <u>Nebraska GIS/LIS Symposium</u>. La Vista, NE.

Wright, M., McCartney, S., Burger P., Tornberg, R., Soppela, J., and N. Bickford. 2017. Using GIS for Habitat Comparisons: A Case Study with Northern Goshawks. NASA Nebraska Space Grant: Nebraska Academy of Sciences. Lincoln, NE.

Pauley, Nicole. 2016. A GIScience Site Selection of a Retirement Community in the Salt Lake City, Utah, Metropolitan Area. <u>Student Research Day - UNK</u>. Kearney, NE.

Sheridan, Fletcher. 2016. *If You Build it Will They Come: Using a GIScience Gravity Model to Estimate Retirement Community Demand in Salt Lake City, Utah* <u>Student Research Day -</u><u>UNK.</u> Kearney, NE. – 3^{al} Place.

Pauley, Nicole. 2016. A GIScience Site Selection of a Retirement Community in the Salt Lake City, Utah, Metropolitan Area. Great Plains Rocky Mountain Division of the Association of American Geographers. Colorado Springs, CO. – 3rd Place.

Ashley Larsen, Nic Stoll, Dayana Rodriguez, Zach Davidson. 2015. Delineation and Analysis of UNK Undergraduate Student Body Market Area Through GIScience. <u>Student Research Day -</u><u>UNK</u>. Kearney, NE.

Cale Eacker, Ashley Larsen, Tayler McPeak, Fletcher Sheridan, Joe Smidt, Tanner Stark, Kaitlyn Taylor. 2015. Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis. <u>Student Research Day -</u> <u>UNK.</u> Kearney, NE.

Ashley Larsen. 2015. A Spatial Examination of Geographic Factors that Influence Voter Turnout in Nebraska. <u>Student Research Day - UNK.</u> Kearney, NE.

Kaitlyn Taylor. 2015. A GIScience Approach to Analyzing Spatial Patterns of Voter Turnout in Omaha, Nebraska. Student Research Day - UNK. Kearney, NE.

Cale Eacker, Ashley Larsen, Tayler McPeak, Fletcher Sheridan, Joe Smidt, Tanner Stark, Kaitlyn Taylor. 2015. Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis. <u>Nebraska GIS/LIS</u> Symposium. La Vista, NE.

Ashley Larsen, Nic Stoll, Dayana Rodriguez, Zach Davidson. 2015. Delineation and Analysis of UNK Undergraduate Student Body Market Area Through GIScience. <u>Nebraska GIS/LIS</u> <u>Symposium</u>. La Vista, NE.

Kaitlyn Taylor. 2015. A GIScience Approach to Analyzing Spatial Patterns of Voter Turnout in Omaha, Nebraska. <u>Nebraska GIS/LIS Symposium.</u> La Vista, NE.

Ashley Larsen. 2015. *A Spatial Examination of Geographic Factors that Influence Voter Turnout in Nebraska*. <u>Nebraska GIS/LIS Symposium.</u> La Vista, NE.

Cale Eacker, Fletcher Sheridan, Ashley Larsen, Tanner Stark, Joe Smidt. 2015. Market Area Analysis of Robinwood Retirement Community: How GIScience Integrates Marketing Geography and Spatial Analysis. Great Plains Rocky Mountain Division of the Association of American Geographers. Kearney, NE. -2^{nd} Place.

Kaitlyn Taylor. 2015. *Generational Political Patterns: The Case Study of Presidential Election Results in Kearney, Nebraska*. <u>Great Plains Rocky Mountain Division of the Association of American Geographers</u>. Kearney, NE. – 1st Place.

Kaitlyn Taylor. 2015. A GIScience Approach to Analyzing Spatial Patterns of Voter Turnout in Omaha, Nebraska. Great Plains Rocky Mountain Division of the Association of American Geographers. Kearney, NE.

PROFESSIONAL MEMBERSHIPS

Association of American Geographers (AAG)

Nebraska GIS / LIS Association

H. Jason Combs

203B Copeland Hall Department of Geography University of Nebraska at Kearney Kearney, Nebraska 68849 (308) 865-8605 Office combshj@unk.edu

Education

Bachelor of Science Major in Geography and Minor in Architectural Drafting Northwest Missouri State University, Fall 1993

Master of Science Major in Resource Planning Thesis Title—Historic Preservation as an Economic Planning Tool: The Case Study of Mount Vernon, Missouri Southwest Missouri State University, Fall 1995

Doctor of Philosophy Major in Geography and Minor in Anthropology Dissertation Title—Early Settlement of a Frontier Community: The Platte Purchase, 1836-1850 University of Nebraska-Lincoln, Spring 2000

Academic Appointments

Assistant Professor of Geography Arkansas State University, 2001-Spring 2007 *Tenured and Promoted, Spring 2007

Assistant Professor of Geography University of Nebraska-Kearney, Fall 2007-Spring 2009

Associate Professor of Geography University of Nebraska-Kearney, Spring 2009-Spring 2014

Professor of Geography University of Nebraska-Kearney, Fall 2014

Competitive Awards and Grants

\$250 College of Natural and Social Science Faculty Mentor Award, Spring 2017 Graduate Studies and Research \$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska at Kearney, Fall 2017Faculty Advisor for Natasha Winfield (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2017 Faculty Advisor for Emma Neil (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2018 Faculty Advisor for Emma Neil (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska at Kearney, Fall 2018Faculty Advisor for Natasha Winfield (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2018 Faculty Advisor for Tate Combs (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska at Kearney, Fall 2018Faculty Advisor (co-chair with Paul Burger) for Claire Christner (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska at Kearney, Fall 2019Faculty Advisor for Tate Combs (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2020 Faculty Advisor for Tate Combs (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows Program
University of Nebraska at Kearney, Fall 2020
Faculty Advisor (co-chair with Paul Burger) for Austin Glause and Justin Vrooman (\$1,000
Student Stipend)

\$150,000 University of Nebraska Collaboration Initiative Grant, July 2020-June 2022 Qureshi, Sajda (UNO), Burger, Paul (UNK), Combs, H. Jason (UNK), Qi, Yi (UNL), Windle, John (UNMC), Barone, Timi (UNO), and Martina Clark (UNO). Spatial Analysis of Health Care Accessibility and Usage in Nebraska.

\$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2021 Faculty Advisor (co-chair with Paul Burger) for Justin Vrooman (\$1,000 Student Stipend) \$1,500 Undergraduate Research Fellows Program University of Nebraska at Kearney, Fall 2021 Faculty Advisor for Tate Combs (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska-Kearney, Fall 2021Faculty Advisor for Oliver Combs (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska-Kearney, Fall 2021Faculty Advisor for Jalynn Ellenwood (\$1,000 Student Stipend)

\$1,500 Undergraduate Research Fellows ProgramUniversity of Nebraska-Kearney, Fall 2022Faculty Advisor for Oliver Combs (\$1,000 Student Stipend)

Student Research Presentations 2017-2022

Undergraduate Research Posters-2017 Jordyn Goodman Stalin and the Forced Migration of Union of Soviet Socialist Republics

Natasha Winfield Spatial Examination of Nebraska's Pioneer and Heritage Farms

Undergraduate Research Posters-2018 Natasha Winfield Spatial Examination of Nebraska's Pioneer and Heritage Farms

> Emma Neil Nebraska's Death Penalty: For or Against

Undergraduate Research Posters-2019

Claire Christner A Geographical Analysis of Medicaid Expansion Politics in Nebraska

Tate Combs Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes Along with Other Facts about the Plains

Natasha Winfield Spatial Examination of Nebraska's Pioneer and Heritage Farms Undergraduate Research Posters-2021 Tate Combs "Leaves from my Journal" William T. Beatty's Account of His Time in the 2nd Ohio Volunteer Infantry

Austin Glause and Justin Vrooman Using GIScience to Understand Service Area Accessibility of Pediatric Weight Management Programs in Nebraska's Rural and Micropolitan Communities *2nd Place Behavioral and Social Science

Justin Vrooman and Austin Glause Market Area Delineation of a Pediatric Weight Management Program in Kearney, Nebraska Through GIScience *2nd Place Behavioral and Social Science

Undergraduate Research Posters-2022

Tate Combs Main Street, Tornadoes, and Train Wrecks . . . Mining eBay for Data

Oliver Combs The Official Atlas of Nebraska

Carson King How Geography Can Help Inform on Public Health: A Link Between Air Pollution and Geography

Jalynn Ellenwood Floral Emblems and United States Cultural Identity

Publications 2017-2022

Combs, H. Jason and Harders, Kenneth. 2017. *Pioneer Life on Glass: The Balcom-Green Collection*. Emporia State University, Center for Great Plains Studies: Emporia, Kansas.

Combs, H. Jason. 2017. David Rankin: America's Greatest Farmer. *Great Plains Quarterly* 37(3): 183-213.

Combs, H. Jason, Burger, Paul, and Sydow, Spencer. 2017. Treasure Hunt Geography: Buying and Selling the History of Kansas Along U.S. Highway 36. *Illinois Geographer* 59(1): 47-66.

Morrill, Richard and Combs, H. Jason. 2018. Metropolitan Concentration of the Democratic Vote. In *Atlas of the 2016 Elections*, ed. Robert Watrel, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 93-96. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason. 2018. Micropolitan County Voting. In *Atlas of the 2016 Elections*, ed. Robert Watrel, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 99-101. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason. 2018. Flipped Counties in the 2016 Election. In *Atlas of the 2016 Elections*, ed. Robert Watrel, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 102-103. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason, Neil, Emma, and Burger, Paul. 2018. A Geographical Comparison of Death Penalty Politics in Nebraska. *The Pennsylvania Geographer* 56(1): 1-14.

Combs, H. Jason and Bratton, Jordyn. 2018. Following the Rivers West: The 1852 Journal of John D. Randall. *Great Plains Traverse* 1(2): 4-27.

Combs, H. Jason, Winfield, Natasha, and Burger, Paul. 2019. Nebraska's Pioneer and Heritage Farms: A Geographical and Historical Perspective. *Great Plains Quarterly* 39(1): 59-76.

Combs, H. Jason, Burger, Paul, Sogar, Christina, Campbell, Julie, Wulf, Timbre, Maughan, Suzanne, and Van Laningham, Jody. 2019. Employing GIScience to Address the Perceived Needs and Service Use among Youth Offenders Preparing for Reentry to Rural and Urban Communities. *Papers in Applied Geography* 5(1-2): 119-125.

Combs, H. Jason and Combs, Tate. 2019. Nebraska's Exaggeration Postcards: Giant Grasshoppers and Two-Ton Potatoes Along with Other Facts about the Plains. *Nebraska History* 100(4): 220-235.

Bartee, Roderick, Heelan, Kate, Burger, Paul, Coughlin, Ava, and Combs, H. Jason. 2019. Spatial Analysis of Cancer Survivors' Accessibility to Exercise Programs Designed Exclusively for Their Needs. *The Pennsylvania Geographer* 57(2): 1-15.

Combs, H. Jason, and Burger, Paul. 2020. Nebraska's Medicaid Expansion: An Interesting Rural-Urban Divide. *The Geographical Bulletin* 61(1): 29-36.

Combs, H. Jason. 2021. "Selling" Nebraska through Archer King's Exaggeration Postcards. *Material Culture* 53(1): 79-101.

Combs, H. Jason. 2021. T.A. Carlson's Real Photo Postcards: Promoting the American Dream in Nebraska. *Great Plains Quarterly* 41 (Winter-Spring): 5-27.

Clarke, Martina, Qureshi, Sajda, Barone, Timi, Qi, Yi, Windle, John, Combs, Jason, Burger, Paul. 2021. An mHealth Approach to Addressing Health Inequity. In *Advances in Human Factors and Ergonomics in Healthcare and Medical Devices*, eds. Jay Kalra, Nancy Lightner, and Redha Taiar. AHFE 2021. Lecture Notes in Networks and Systems, Volume 263. Springer. Burger, Paul, Combs, H. Jason, Qureshi, Sajda, Windle, John, Barone, Timi, and Clarke, Martina. 2021. Spatial Analysis of Health Care Accessibility and Potential Mobile Health Usage in Nebraska. *The Pennsylvania Geographer* 59(2): 19-31.

Combs, H. Jason and Morrill, Richard. 2022. Democratic Vote, 2020. In *Atlas of the 2020 Elections*, ed. Robert Watrel, Kimberly Maier, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 99-102. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason. 2022. Micropolitan County Voting. In *Atlas of the 2020 Elections*, ed. Robert Watrel, Kimberly Maier, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 106-108. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason. 2022. "Flipped" Counties in the 2020 Election. In *Atlas of the 2020 Elections*, ed. Robert Watrel, Kimberly Maier, Ryan Weichelt, Fiona Davidson, John Heppen, Erin Fouberg, J. Clark Archer, Richard Morrill, Fred Shelley, and Kenneth Martis, 109-111. Lanham, Maryland: Rowman & Littlefield.

Combs, H. Jason. 2022. Dust Storms, Jackrabbits, and Grasshoppers . . . Oh My! Frank 'Pop' Conard and His Exaggerated Creations. *Kansas History: A Journal of the Central Plains* 45(2): 88-101.

Jeremy S. Dillon, Ph. D

Abbreviated CV

1202 West 31st St. Kearney, NE 68845	(308) 338-0826 dillonjs@unk.edu
EDUCATION	
Doctor of Philosophy in Geography	2002
University of Kansas Dissertation: Soils and Soil-Forming Processes in a Cool, Dry Environment: The Upper Green River Basin in Western Wyoming	
Master of Arts in Geography	1992
University of Nebraska at Omaha	
<i>Masters Thesis</i> : Holocene Alluvial Stratigraphy and Landscape Development Honey Creek Basin, Nemaha County, Nebraska	in
Bachelor of Science in Geology University of Nebraska at Lincoln	1987
CURRENT POSITION	
UNIVERSITY OF NEBRASKA AT KEARNEY DEPARTMENT OF GEOGRAPHY	
PROFESSOR 2015	
ASSOCIATE PROFESSOR 2007	
ASSISTANT PROFESSOR 2002	

PUBLICATIONS

REFEREED JOURNAL ARTICLES

Dillon, J.S., Stolze, S., and Larsen, A.K, 2018, Late Pleistocene Pollen and Plant Macrofossils from the Platte River Valley, South-Central Nebraska; Great Plains Research, 28: 173-183.

Dillon, J.S., and Bozell, J.R., 2016, At the Intersection of Geology, Archaeology, History and Art: Engineer Cantonment (1819-1820), Washington County, Nebraska: Great Plains Research, v26, 1-20.

OTHER PUBLICATIONS

- Hanson, P.R., Young, A.R., Larsen, A.K., Howard, L.M., Dillon, J.S., 2017. Surficial Geology of the Fairmont 7.5 Minute Quadrangle, Nebraska: 1:24,000 scale Geologic Map published by the University of Nebraska-Lincoln in cooperation with the United States Geological Survey
- Young, A.R., Hanson, P.R., Larsen, A.K., Howard, L.M., **Dillon, J.S.**, 2017. Surficial Geology of the Exeter 7.5 Minute Quadrangle, Nebraska: 1:24,000 scale Geologic Map published by the University of Nebraska-Lincoln in cooperation with the United States Geological Survey

- **Dillon, J.S.,** Hanson, P.R., Larsen, A., Bruihler, J., Raymond, C., and Howard, L.M., 2016, Geology of the Platte River Valley near Kearney, Nebraska. Nebraska Conservation and Survey Division Guide Book 19, 23 p.
- Dillon, J.S., Hanson, P.R., Larsen, A., Raymond, C., and Howard, L.M., 2015, Surficial Geology of the Kearney SW 7.5 Minute Quadrangle, Nebraska: 1:24,000 scale Geologic Map published by the University of Nebraska-Lincoln in cooperation with the United States Geological Survey

TECHNICAL REPORTS

(Unpublished technical reports of investigations submitted to the indicated state agencies.)

- Bauer, A., and Dillon, J.S., 2021. Archeological and Geomorphological Survey of the Douglas County Wetland Bank: Technical Report prepared for Felsburg, Holt & Ullevig, and Douglas County.
 Submitted to the Nebraska State Historical Society - Office of the State Archeologist.
- Dillon, J.S., 2020, Phase 1 and 1a Geomorphological Investigation of the Winterset, Iowa Regional Airport: Submitted to the Iowa Office of the State Archaeologist.
- Bozell, J.R., Dillon, J.S., Nickel, R.K., and Nickel, C.A., Chapter 3: The Archaeological Investigations: in Bozell, J.R., R.E. Pepperl, and G.F. Carlson. (2018) Archeological Investigations at Engineer Cantonment: Winter Quarters of the 1819-1820 Long Expedition, Washington County, Nebraska. Nebraska State Historical Society Publications in Anthropology 12. Lincoln, NE.

GRANT AWARDS AND CONTRACTS

- Dillon, J.S., 2019/2020, Historic Resources Winterset IA Airport: Historic Resources Group, Inc., UNK Portion \$4,963.20
- Dillon, J.S., Drew, B., Grimm, E.C., Yansa, C., 2019-20 UNK Research Services Council Collaborative Grant: Pollen, Plant Macrofossils, and Ancient DNA: An Interdisciplinary Study of the Kearney Paleoecology Site. \$11,915.5
- Drew, B, Simon, D., and **Dillon, J.S.**, 2019-22 UNK Research Services Council Research Stimulation Program - Postdoctoral Researcher Request. \$153,323
- Dillon, J.S., Hanson, P.R., and Stolze, S., 2017, The Geologic History of Glacial Lake Kearney and the Platte River-Wood River Divide in South-Central Nebraska, USA. RSC Collaborative Research Grant: \$4,985.00
- Hansen, P.R., Joeckel, R.M., Dillon, J.S., New Surficial Geologic Mapping in the Kearney SW 7.5-Minute Quadrangle, Nebraska: USGS STATEMAP Cooperative Geologic Mapping Program, Spring 2015: UNK Portion \$2,181

UNDERGRADUATE STUDENT GRANTS AND AWARDS

- Ashley Larsen Summer, 2015. UNK Summer Student Research Program \$3,250
- Larsen, A.K., and **Dillon, J.S.**, Late Pleistocene Paleo environmental record from the Platte River Valley in South-Central Nebraska: Pepsi Experiential Learning Fund, Spring 2015: **\$250**.
- Kaslon, Emily UNK Research Services Council 2014-2015 Student Grant Program: Is the Loper Fan a True Fan? **\$200**

INVITED LECTURES

- *The Kearney Boreal Forest*. Kearney International Association of Torch Clubs, Kearney Chapter, January 3, 2022.
- Geology and Paleoecology of the Kearney Area during the Last Glacial Maximum: Our Ice Age Landscape 23,000 Years Ago. UNK Research Services Council Science Café, March 8, 2019.
- Geology and Paleoecology of the Kearney Area during the Last Glacial Maximum: Our Ice Age Landscape 23,000 Years Ago. Sigma Xi Science Café, October 1, 2018.

STUDENT PRESENTATIONS

- **Dillon, J.S.,** Albrecht, Z, Christner, C., Degner, T., and Guerra, B., 2019, The contact between Peoria Loess and the Gilman Canyon Formation in the Kearney area, South-Central Nebraska: Nebraska Academy of Sciences Annual Meeting, Lincoln, NE, April 2019.
- **Dillon, J.S.,** May, R., Nichol, D., and Urban, D., 2018, The possible effects of mobilized eolian sand on soil formation in Peoria loess, south-central Nebraska, USA: Nebraska Academy of Sciences Annual Meeting, Lincoln, NE, April 2018.
- **Dillon, J.S.,** Larsen, A.K., and Stolze, S., 2017, Late Pleistocene pollen and plant macrofossils from the Platte River valley, south-central Nebraska: Geological Society of America Annual Meeting, Seattle, WA.
- Larsen, A., and Dillon, J.S., 2015, A Buried, Late-Pleistocene (~23,500 cal BP) Spruce Forest-Wetland Environment Preserved in Platte River Alluvium, South-Central Nebraska, USA. Association of American Geographers - Great Plains / Rocky Mountain NE. October 2-3.
- Dillon, J.S., Hanson, P.R., Larsen, A., Bruihler, J., and Howard, L.M, 2015, Additional Subsurface Investigations from Platte River Terrace Alluvium in the Kearney Quadrangle, South-Central Nebraska, USA. Association of American Geographers - Great Plains / Rocky Mountain Division Annual Meeting: Kearney, NE. October 2-3.
- Dillon, J.S., Larsen, Ashley K., Hanson, P.R., Bruihler, Jacob C., and Baker, Richard G., 2015, An occurrence of Late-Pleistocene spruce macrofossils in a Platte River terrace fill, south-central Nebraska: Geological Society of America (GSA) North-Central Section meeting, Madison, WI., May 19-20.

SERVICE

PROFESSION

- Peer-reviewer for LaBelle, J.W., and Meyer, K.A., Kill, Camp, and Repeat: Return to the Lindenmeier Folsom Site, Colorado for *Great Plains Research* 2020
- Peer-reviewer for A. Layzell, R. Sawin, R. Mandel, G. Ludvigson, E. Franseen, R. West, and W. L. Watney, Quaternary Stratigraphy and Stratigraphic Nomenclature Revisions in Kansas for *Current Research in Earth Sciences* 2017
- .Peer-reviewer for R. M. Joeckel, "Solving A Periglacial Puzzle: Pleistocene Polygonal Ground, North-Central Nebraska" for publication in *Great Plains Research* 2017

UNIVERSITY

UNK General Studies Council	2019 - present
UNK Faculty Senate Academic Freedom and Tenure Committee (Chair)	2018 - 2021
UNK Faculty Senate Faculty Welfare Committee	2018 - 2020
UNK Faculty Senate Grievance Committee	2018 - 2020
UNK College of Natural and Social Sciences Rank and Tenure Committee	Spring 2018
UNK Faculty Senate	2015 - 2021
UNK General Studies Council	Spring 2014
UNK College of Natural and Social Sciences Educational Policy Committee	2013 - 2017
UNK Faculty Senate Faculty Welfare Committee (Chair)	2012 - 2016



3419 6th Avenue Kearney, NE, USA 68845 (308)224-6965 neidem@hotmail.com

EDUCATION

Ph.D. in Geography, Natural Resources Emphasis, Oregon State University, 2012 Dissertation: *Enhancing Social-Ecological Resilience in the Colorado River Basin*

M.S. in Geography and Environmental Resources, Water Resources Planning Emphasis, Southern Illinois University - Carbondale, 2005

B.S. in Geography and Earth Science, University of Nebraska - Kearney, 2003 Minor: Biology

TEACHING EXPERIENCE

2010-presentAdjunct Lecturer – University of Nebraska - Kearney (UNK)2007-2008Adjunct Instructor – Western Oregon University (WOU)

FUNDED GRANTS

- 2019-2021 University Collaborative Research Stimulation Program, Nathan Eidem and Mary Harner, \$3,981
- 2018-2019 Kelly Fund Award, Nathan Eidem and Steven McGahan, \$60,500

RECENT PUBLICATIONS

- Liew, H.P. and N. Eidem. 2021. Examining the potential impacts of processes associated with urbanization and land use changes on inundation depths in areas affected by Hurricane Harvey in Houston. *Community Development*. pp. 1-13.
- Liew, H.P. and N. Eidem. 2021. Examining the potential impacts of social vulnerability on damage levels in areas affected by Hurricane Harvey. *Journal of Homeland Security and Emergency Management*.
- Liew, H.P. and N. Eidem. 2020. Assessing the spatial-temporal clustering and health implications of fine particulate matter (PM2.5). *Journal of Public Health*.
- Eidem, N.T., K.J. Fesler, and A.T. Wolf. 2012. Intranational Cooperation and Conflict over Freshwater: Examples from the Western United States. *Journal of Contemporary Water Research Education*. Special Volume on Scale Interactions and Implications for Water Resources, Hydrology and Climate. 147: 63-71.

PRESENTATIONS

- 2019 360 Degrees of Geography. NU Innovation in Pedagogy and Technology Symposium. Lincoln, NE.
- 2019 Panel Discussion on Kelly Fund Research. Innovation in Pedagogy and Technology Symposium. University of Nebraska. Lincoln, Nebraska.
- 2014 Social-Ecological Resilience in the Colorado River Basin. Great Plains Rocky Mountain Regional Meeting of the Association of American Geographers. Albuquerque, NM.

ACADEMIC SERVICE

2018-present International Friendship Program Host Family. UNK.

- 2018-2020 Loper 2 Loper Student Mentor. UNK.
- 2015 Moderator, Water Resources Paper Session, Great Plains Rocky Mountain Regional Meeting of the Association of American Geographers. Kearney, NE.
- 2014-2015 Geo Bowl Coordinator, Great Plains Rocky Mountain Regional Meeting of the Association of American Geographers. Albuquerque, NM (2014) and Kearney, NE (2015).
- 2012-2013 Grant Proposal Reviewer, University of Wisconsin Water Resources Institute.

Appendix B—Alumni Highlights

Zach Davidson

2013 UNK Geography & GIScience

I work for Miller & Associates Consulting Engineers, P.C. as a construction resident technician. My job is to observe civil engineering construction projects. Projects include: installation of storm, sanitary, and water main pipe and building of roads. My activities include writing a daily log of construction activities and quantities installed or constructed. While in the field, I assist the contractor when problems arise with the plans or understanding the engineer's intentions. What is the most critical about my job is keeping the contractor in state, city, and the engineer's construction specifications. Physical geography is used daily with the understanding of soils, terrain, erosion, and slope. In the future, I hope to learn more surveying and possibly grow the use geographic information systems within the company.

Ashley Larsen

2016 UNK Geography

I am a Housing Development Specialist at the Southeast Nebraska Development District (SENDD), located in Lincoln, Nebraska. SENDD is a nonprofit organization and is one of the eight districts that comprise the Nebraska Regional Officials Council (NROC). We serve fourteen counties in the southeastern part of the state and have a strong emphasis on grant writing and administration. As a Housing Development Specialist, one of my primary roles is writing grants to help secure safe, decent, and affordable housing opportunities for low-moderate income individuals in our district. We pursue both State and Federal funds and since March 2019 I have been involved in the writing of several owner-occupied rehabilitation and disaster recovery grants offered by the Nebraska Affordable Housing Trust Fund (NAHTF). This spring I also became a certified Community Development Block Grant (CDBG) grant administrator and will soon begin putting together more owner-occupied rehabilitation grants for the current cycle of CDBG funding. Along with grant writing and administration duties, I a also responsible for carrying out SENDD's Nuisance Abatement Program. Currently, I am working in three communities as a nuisance code enforcer. This process involves monthlybimonthly windshield inspections to document any properties in violation of the community's adopted ordinances. Identified properties receive anywhere from 1-3 letters, depending on whether or not they comply with the initial courtesy letter. If noncompliance is documented after an ascribed period of time, the community may choose to abate the nuisance(s) at the property owner's expense. Additionally, I have recently become licensed by the State of Nebraska as a Lead Inspector/Risk Assessor and will be conducting several lead assessments in homes that are involved in SENDD's programs. Our Housing Division has also recently created SENDD Contracting, which is a state registered contracting business operated under SENDD itself. We specialize in roofs, siding, gutters, and windows, and offer these services to areas outside of SENDD's district as well (especially in Lincoln and Omaha). It is a joy to come to work every day everyone at SENDD is wonderful to work with and it is fulfilling to see the kinds of impacts our grant programs make in our communities and region!

Trey Ertmer 2017 UNK Geography

Shortly after graduating from the University of Nebraska-Kearney, I took a role as an Economic Development Specialist with the Southeast Nebraska Development District (SENDD). SENDD is a voluntary association of counties and municipalities formed under the Nebraska Interlocal Cooperation Act to identify common problems, their solutions, and to provide continuing support for the efficient and effective government among its members. SENDD currently serves fourteen counties in southeast Nebraska. As an Economic Development Specialist with SENDD, it is my role to work with Economic Developers within our region as well as across the state to connect rural businesses to funding and development opportunities. SENDD often serves as the last piece of the puzzle for small businesses looking to expand or entrepreneurs looking to start their business. However, economic development does not happen through one organization, it is a collaborative effort among many partners. SENDD works closely with the Department of Economic Development (DED), the Economic Development Administration (EDA), the United States Department of Agriculture Rural Development (USDA) and many other federal, state, and local organizations. My primary role at SENDD is serving as the District's business loan officer. We manage several revolving loan funds which assist businesses that would not likely be able to obtain financing from a primary lender. This allows for new development in small towns as well as the creation of jobs and the overall stimulation of the economy in rural communities that generally experience little growth. Another program we work closely with is the Community Development Block Grant (CDBG) Downtown Revitalization Program through the Department of Economic Development. This a grant program that is awarded to communities to assist with revitalization efforts located within a downtown business district. This program provides business/building owners with financial assistance for the design and construction of new or renovated building facades and improvements to meet city code requirements. This resource allows the community to address poor aesthetic conditions and to enhance the perception of the downtown district by eliminating slum and blight. Downtown revitalization efforts transform Central Business Districts by creating vibrant and visually appealing environments for all users. Lastly, one of the main issues that rural Nebraska faces is the lack of affordable and quality housing in rural communities. In 2018, SENDD wrote a grant that awarded nearly \$1.6 million to the region to assist in the development of attractive housing options that lead to recruitment and retention of working-class individuals in the communities we serve. We work with communities as well as developers to understand the needs of the communities as well as package financing options and incentives to bring development activities into these rural communities. I grew up in a small town in northwest Illinois where I learned the meaning of community pride and the sense of place associated with rural America. Every day I get to help the rural communities of southeast Nebraska with opportunities to grow their economy and community. It is a surreal feeling to see projects completed or new businesses open in a community and know that you were part of the effort that made it all possible.

Jake McGlade

2010 UNK Geography

Jake McGlade serves as the Market Research and Site Analyst for Cameron General Contractors (CGC). Jake's graduate thesis focused on the application of GIS to marketing, location analysis, and site selection. He is responsible for locating and closing on new sites for Resort Lifestyle Communities. Jake continues to develop new techniques in the senior housing industry to target new market growth opportunities, target geographic marketing campaigns, evaluate socio-economic patterns of current and interested customers, and locate sites that pose the greatest opportunity for product longevity. Jake developed a customized, web based software application that ranks areas within cities and uses aerial imagery, statistical methods and business models to aid his geo-demographic market research. He works with brokers across the U.S. finding suitable parcels that meet CGC's placement criteria.

Steven Burback

2012 UNK Geography & GIScience

I am working for Servi-Tech as an Ag Specialist, primarily with soil moisture monitors. Much of this deals with the installation, maintenance, extraction of monitoring devices and creating recommendations for irrigation. I evaluate data from profilers and make recommendations to producers based on the data. The data is in graph form and from that irrigation rates are determined. I will soon be doing grid sampling, variable rate mapping, and soil moisture and texture mapping as well.

Helen (Breuer) Potter

2011 UNK Geography

My official title is "Survey Aid Technician" at the Kearney County NRCS. I help assemble and maintain applications and contracts for farmers involved with various environmental conservation programs--mainly EQIP (Environmental Quality Incentives Program), AWEP (Agricultural Water Enhancement Program), and CSP (Conservation Stewardship Program). I use ArcMap to create "Conservation Plan Maps" and "Soil Maps" for new contracts in each of these programs, which depict the items and practices in the contract. Other duties include updating pivot and wetland inventory maps, determining highly erodible and non-highly erodible land, assisting with prescribed burns and cultural resource excavations.

Jon Reiter

2006 UNK Geography & GIScience

My arrival at the UNK Geography department in the fall of 2003 came after a year in the Biology Department. I was considering switching as the coursework and experience in the Biology Department was not quite what I wanted. I was immediately impressed by the personal attention and interest my advisor and other faculty took in helping me pursue my goals and interests. While I certainly found most all of the Geography coursework interesting, I began to develop a special interest in GIS, which was taught by Dr. Paul Burger. The experiences and relationships built within these courses really laid a solid foundation for my work in GIS today and Dr. Burger in particular had a tremendous impact on my career path. In spring 2006, I graduated from UNK with a BS in Geography Environmental Emphasis and Minor in Biology, and had a full time job waiting with the Upper Big Blue NRD in York, NE upon graduation. I spent just over two years working with the NRD and then in the fall of 2008, I took an opportunity to be GIS Analyst for the City of Scottsbluff, Nebraska. I am still employed with the city and live in Scottsbluff with my young family. I find my work in GIS very rewarding and I am grateful to have a career that I enjoy so much. There is no doubt that the academic experience during my time in the UNK Geography Department prepared me very well for my career.

Mike Murphy 1999 UNK Geography

Mike Murphy grew up in Columbus, Nebraska and transferred to the University of Nebraska-Kearney in 1997 majoring in Geography with a minor in History. During my last year at UNK, I completed an internship with Tri-Basin Natural Resources District created with help from Geography Professor Steele Becker and Tri-Basin's Manager John Thorburn. During his internship, Mike learned about the NRD system and its role in conserving Natural Resources. Some of his duties included performing tree planting, water sampling, spraying noxious weeds, ultrasonic flow-meters with the Natural Resources Conservation Service (NRCS) and other activities. For my senior seminar I did a project showing the growth of 2nd Avenue due to development of the Interstate and changes over time. Mike earned the respect of the Geography Department faculty and was an Honors graduate in December 1999 with a 3.70 GPA. Mike has been employed with Aerial Services, Siouxland Interstate Metropolitan Planning Council (SIMPCO), Nebraska Title Company, and is now a GIS Specialist at the Lower Elkhorn Natural Resources District (LENRD) in Norfolk, Nebraska. Experience at the LENRD includes fieldwork and creating maps pertaining to water sampling, water levels, construction of new monitoring wells, addition of new irrigated acres, and assisting other government agencies.

Kaitlyn (Taylor) Droll 2015 UNK Coography

2015 UNK Geography

I currently work remotely for National Indemnity Company as a Commercial Property Claim Examiner. My job is to manage the claim process from start to finish, working with Adjusters and Engineers to inspect large commercial property damages. While I do not use GIS daily, my working knowledge of physical geography and GIS have proven beneficial within this position. Understanding the physical geography of the areas these commercial buildings are located, I can discern what type of physical damage is likely to occur. This allows for easier communication between myself and Engineers when determining causes of the damages. My time with UNK's Geography and GIS Program has allowed me to excel at my current position and has provided me with experience that I can apply beyond this current career.

Andrew Miller

2012 UNK Geography & GIScience

After spending a little more time in my contractor position, I was hired as a full-time employee in the Real Estate Department at Union Pacific. I am one of three GIS Analysts who play a support role in the department. We add and maintain information to Union Pacific's electronic field book. Property managers use the field book to decipher where real estate agreements such as sales, leases, and utility crossings are or should be located when they do site reviews. We get the chance to view documents dating from the present to the beginning of the railroad in order to locate what real estates the railroad does or does not own. This includes the original valuation section maps that the government required UP and its predecessor railroads to keep in order to tax what land we used or took ownership of. All of this information provides new information to be learned every day, so I am easily kept busy with multiple projects either shared by my coworkers or specific to my position.

Nic Stoll

2013 UNK Geography & GIScience

I live in my hometown Marysville, Kansas and am married with two kids, Oran who is two years old and Piper who is just three months. I work for Cropmetrics remotely and wear lots of hats. I help farmers know when, how much, and where to water using the best precision irrigation technology available. I also provide other precision agriculture services to growers such as prescriptions and data management. This also ties into other responsibilities I have at Cropmetrics where I am our Salesforce administrator. Salesforce is a CRM (Customer Relationship Management). There is a lot to learn and endless possibilities with what Salesforce can do to help companies streamline business processes, for example training, customer service, order processing, lead management, and billing to name just a few. Salesforce ties into much of the data management skills I learned going through UNK's GIS program. The precision agriculture data management is very GIS oriented, working with yield data, imagery, cost benefit analysis, and soil data.

Brett Chloupek

2005 UNK Geography

I am starting my 10th year at Northwest Missouri State University as an associate professor of geography. These days, I teach most of our upper-level non-US geography courses including the geographies of Europe and Asia. I also teach Maps and Spatial Reasoning, Geopolitics, and several sections of Peoples and Cultures of the World. My research over the past few years has focused on the politics of place naming, particularly in Eastern Europe. Additionally, I have written on the politics of commemoration and tearing down of monuments. This summer I conducted fieldwork throughout central Slovakia, visiting many of the monuments built to commemorate the Slovak National Uprising of 1944. My wife, three daughters, and I also made a road trip from Slovakia to Germany, making stops in Austria, Switzerland, and Lichtenstein. This fall, I have an article appearing in Great Plains Research about the substantive nature of the Bohemian Alps region of Nebraska. I look back on my time in the Geography Department at Nebraska Kearney fondly and wish the students and faculty all the best!

GEOGRAPHY REVIEW TEAM MEMBERS

Dr. Randy Bertolas, Chair, Wayne State College Dr. Julie Shaffer, Department of Biology Dr. Theresa Wadkins, Department of Criminal Justice Kaitlyn (Talyor) Droll, Alumni Representative Justin Vrooman, Student Representative Elizabeth Pearson, Student Representative

Tentative Schedule

Day 1-Thursday, October 27

Day 2-Friday, October 28

8:00-9:00	Orientation breakfast with review team in Copeland 244.
9:00-10:00	Meet with CAS Dean, Dr. Ryan Teten in Copeland 244.
10:00-11:30	Meet with Chair, Jason Combs
11:30-1:00	Lunch in Student Union
1:15-2:00	Meet with Students
2:30-5:00	Reviewers meet with faculty in Copeland
2.30 5.00	244.
	2:30 Jeremy Dillon
	3:00 John Bauer
	3:30 Vijendra Boken
	4:00 Nate Eidem
	4:30 Paul Burger
1	will be open if there is need for an evening on October 27.
8.00-9.00	Follow up meeting with students or faculty
8:00-9:00	Follow up meeting with students or faculty representatives if necessary in Copeland
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