

# Geo Notes



## INSIDE GEOGRAPHY / NMSU

Alumni Updates	2-5
Research & Teaching	6-7
Awards: Jack Wright	8
Coffee w/the Deans	9
Homecoming Celebration	10
Student Organizations	11
Geography Awareness Week, 2013	12
Speaker Series	13
SpARC Lab Updates	14

## Message from the Interim Department Head

WELCOME! A friendly greeting to all from the Department of Geography at NMSU. There has been a lot of activity here in the Breland Hall. Dr. Brown is on sabbatical so I am interim department head through June 2014. Dr. Wright (Jack) has been racking up the awards including the Westhafer Award for Excellence in Teaching, which is NMSU's highest faculty honor, and the Donald C. Rousch Excellence in Teaching Award. Dr. DeMers was recently named president of the National Geographic Education Council.



Dr. Carol Campbell

As we see spring weather approach I am happy to share some of the highlights of Fall 2013. We are reaching out to local, regional and national contacts, working on exciting new projects, and we hosted some great events in fall 2013. These include: Homecoming October 22, Geography week speaker series, and Coffee with the Deans' December 4. Geography supports four student clubs that are getting out and getting some dirt under their feet. The Spatial Applications Research Center (SpARC) has been successful in bringing new projects into the lab and the Projects page of the SpARC website will keep you updated on these efforts.

*Carol Campbell, Associate Professor and newsletter editor.*

## Mission Statement

The mission of the NMSU Department of Geography is to enable our graduate and undergraduate students to be responsible citizens, lifelong learners, and professional geographers with critical thinking and problem-solving skills that make them competitive in both graduate programs and the job market; advance, basic, and applied geographic research on issues of relevance to the State of New Mexico and the American Southwest; and to reach out and serve the University, the State, local communities, and the discipline of geography.

## Vision Statement

The NMSU Department of Geography seeks to build a strong and effective learning community of graduate and undergraduate students, faculty, and others to create, share, and apply knowledge and skills in the areas of geospatial science and technology, geographical field techniques, and human-environment system dynamics.



## ***Alumni Updates: Master of Applied Geography***

**Raymond “Randy” Carr**; GIS Coordinator/Analyst-Spatial Applications Research Center (SpARC), Geography Department-NMSU

### **What year did you graduate?**

I graduated from the MAG program in 2009.

### **What was your specific program or focus of study?**

My focus of study was the use of GIS to examine the suitability of selected bicycle routes in Las Cruces, NM.

### **Who was your major advisor?**

My advisor was Professor Robert Czerniak; the geography department's expert in transportation geography.

### **Describe what your thesis was about and your approach.**

My thesis research can be summarized as follows:

*“America's reliance on the automobile presents significant challenges for urban and transportation planners. The dilemmas associated with society's auto dependence i.e. environmental, health, and socioeconomic, suggest that individuals and government reevaluate our reliance on our automobile dominated transportation system. The prospect of using bicycles to address daily utilitarian transportation needs is promising, but much work needs to be done to integrate this underused mode of transportation into the lives of Americans.*

*The focus of this (my) research is to evaluate selected routes within the Las Cruces, New Mexico MPO Bicycle Suitability Map network. The research examined nine shortest distance paths from nine Traffic Analysis Zones with the highest student populations to the university campus. Ideally, if the shortest distance paths were also the "most suitable" bicycle routes (according to the bicycle suitability map), both routes would be identical. GIS analysis is used to determine whether the Shortest Path (distance) is also the Most Suitable Path. Alternatives to the shortest distance path were generated based on the map's suitability index to locate Most Suitable Path routes. Each of the individual routes were analyzed, and implications regarding specific street segments were addressed.*

*The results of this research show that the Shortest Path routes from the highest student populated TAZs to New Mexico State University are frequently not the Most Suitable Path routes. The implication of these results is that students traveling to the University will travel longer distances if they choose to ride the Most Suitable (i.e. safest) Path. The results of this study can be used by the MPO to make specific bicycle facility suitability and safety improvements. The overriding goal is to increase the safe use of bicycles for commuting purposes by university students”.*

### **Did anyone else play a role in your work?**

Dr. Brown was also on my committee and was involved with bicycle planning in Las Cruces at the time.

### **What was the new innovation of the day (time) ?**

I started with ArcGIS 9.2 and found that ArcGIS Desktop was the best option for the work I was doing. I was also



***Alumni Updates MAG Continued.....***

exploring using other options at the such as TransCAD 5.0 and Delorme v. I found that TransCAD was overkill for my purposes and better suited for automobile planning. Delorme worked well for planning bike trips, but was less suitable for transportation analysis.

**What did you do when you left NMSU?**

When I left the program I briefly worked for SpARC on various projects. Following that I did not work in the field of geography for a couple of years, but worked with GIS to explore personal interests; i.e. planning bicycle trips, exploring urban agricultural options in the region.

**Is there any technique or approach you used in thesis/grad work that was particularly beneficial later?**

Geocoding was always a useful technique; it is much easier to perform this these days.

**How has your geography degree helped you?**

My geography degree has helped me by assisting in visualizing changes in the landscape in time and space. This is useful for nearly any area of interest.

**What are you doing these days?**

Currently I am the GIS Coordinator/Analyst for the SpARC, in the Geography Department. I am also working with the New Mexico Geographic Alliance to promote geography and GIS education in New Mexico Schools. I will be attending T3G (Teachers Teaching Teachers GIS) at Redland in June. I have presented at the *National Council for Geographic Education (NCGE)* annual conferences for the past two years. The topics were related to informal web-based approaches to GIS education.

**What's next? What are your long-term plans?**

Long term plans; do good work, eat right, and do no harm.

## ***Alumni Updates: Bachelor of Science (Geography)***

### **Pete Mattox**

#### **What year did you graduate, and from what program?**

I graduated from NMSU in 2010 with a bachelor's degree in geography. I was 28 years old, a non-traditional student.

#### **What did you study at NMSU, any minor or sub-area?**

My basic strategy as an undergrad was to take full advantage of all academic opportunities available to me as best I could. Though this approach didn't lead to any minors, it could've very easily led to about seven of them. Once you pay tuition, you can take up to 18 credits as a full time student. I almost always did this. It was a lot of work, but why miss out on anything? One opportunity in particular that NMSU does a good job of making possible to students is study abroad. If you're studying geography, how could you not do this?! Programs are cheap compared to almost any other university in the USA and there's lots of options for extra funding. For example, I got to spend a year in China and it didn't cost me a dime.



Then (2010)

#### **Best class memory or activity, and worst?**

I thought Dr. Dugas' Intro to Physical Geography course was consistently fascinating and did a great job presenting complex ideas in an understandable way. For me, the result of taking that class has yet to wear off: I walk around and the world is literally more interesting and gorgeous to look at. I think Dan Dugas deserves some type of major teaching award. Most of the people reading this interview have probably taken his class already, so they will know what I mean...

By contrast, the worst class experiences I had were consistently of the "death by PowerPoint" variety. Plenty of professors at NMSU go this route, and in my opinion it's a big problem. Professors who don't, or aren't able to, consider the perspective of students taking the class have no business teaching. Period.

#### **What was the new technology of the day when you were in school? Is it still being used?**

When I started college it was the year 2000. Napster was a big deal and I'm pretty sure iTunes didn't exist yet. I worked at a movie theater and part of my job was loading actual film onto reels! Maybe 1/3 of people had cell phones. Some people had laptops, but plenty more didn't. Much has changed.

#### **What did you do when you left NMSU?**

When I graduated from NMSU I hiked to Canada on the Continental Divide Trail. I started right from Milagro's Coffee Shop near campus and caught the official trail up at Emory Pass in the Gila. The trip took four months and cost about \$1500. I wanted to do it before I started having to pay back my loans. You have a grace period of, I think, six months before being financially responsible sets in... After the hike, I found a job teaching SAT-preparation courses in Beijing, China and moved there.

## ***Alumni Updates BS of Geography Continued.....***

### **What are you doing these days?**

I've more-or-less been in China since graduating. While I wanted to stay long enough to learn really solid Mandarin, that's almost three years ago! I came back to the USA in the fall. I've spent the past few months since then checking-in with my life, visiting family, seeing friends, renewing my driver's license, etc. At the moment I'm hanging out and waiting to hear back on some graduate school applications. I've applied to continue with geography at CU Boulder (MA) and Cal Berkeley (PhD).

### **What's next?**

We'll see if they let me into school. On most days I feel good about my chances, but that decision is beyond my control. I should find out sometime around Valentine's Day and will make necessary "life decisions" at that point.

### **How has your geography degree helped you?**

To me, geography is really about trying to engage with reality in an honest and clear-eyed way. I had initially started out in college as a philosophy major, but that route was way too internal for me. Geography helps me think about the relationship between people and the environment with more depth than I otherwise would. What I mean is that geography can be a pretty good gauge by which to sort out what to resist, and what to obey, what to take seriously, and what to take lightly. But that's all pretty goopy and non-sensical...

In a practical way, if I end up a professor, geography might be buttering my bread for the rest of my life. Who knows?!

### **Any recommendations for future alumni?**

Buy a backpack, a water bottle, and a camera and a wrist compass and get out the dang front door. Whether it's into the Organ Mountains, El Paso, Africa, whatever. Anything other than just staying at home. Fortune favors the bold. The world waits to delight in you. Though what do I actually know about anything? (I'm 31, unemployed, understand nothing about women, and my truck is older than most of this year's seniors). Best of luck to all.



Now (2013)



## Research & Teaching News

### Geography teams with Civil Engineering for NM Highway Study

Dr. Dugas is currently a Co-Principal Investigator with Douglas Cortez (PhD), Paola Bandini (PhD), and Brad Weldon (PhD) of the NMSU Civil Engineering department on a two-year grant funded by the New Mexico Department of Transportation titled, "Development of a Subgrade Stabilization Protocol for Design and Construction Control". His role is to map various soil characteristics as part of a field handbook that will assist highway engineers in the assessment of subgrade soil suitability for road construction and traffic loads. The Geography Department's Spatial Applications Research Center (SpARC) is being utilized. Lab Director, Randy Carr, and graduate student, David Silcock, and undergraduate John McGlone have headed the lab's contribution to the mapping; cartographically converting Dr. Dugas' ideas into GIS products.

### Professor DeMers elected President of the National Council for Geographic Education

Beginning January 1st, Dr. Michael DeMers began his year-long term as President of the National Council for Geographic Education (NCGE). NCGE is the only national organization devoted exclusively to geography education and produces two journals: *Journal of Geography* and *The Geography Teacher*. Both are referred publications issued four times per year. NCGE is also the publisher of "Geography for Life (2<sup>nd</sup> Edition)" which provides a set of curriculum guidelines for K-12 geography education and is a major update from its original.

DeMers serves his term during the 99<sup>th</sup> year of NCGE's existence and will oversee the activities of their national meeting in Memphis, Tennessee July 31 to August 3, 2014. The keynote speaker will be Mr. Brian Unger, the host of The History Channel Series "How the States Got Their Shapes." In 2015 NCGE will celebrate its centennial meeting in Washington, D.C. with tours and activities that only the nation's capitol can provide. During that meeting Dr. DeMers will be the immediate past president, completing a five-year term of service, which began in 2011 when he became Vice Chair for External Relations. NCGE has a partnership with the New Mexico Geographic Alliance that provides \$50 dues (a 50% discount) to Alliance members who wish to join NCGE.

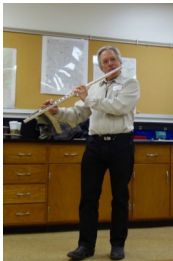


Dr. DeMers at Mount Vernon

## Research & Teaching News Continued

### New Mexico Geographic Alliance has its first strategic planning meeting.

Saturday, January 25, 2014 marked the beginning of a process of strategic planning designed to provide guidance for the New Mexico Geographic Alliance (NMGA). The Alliance moved to New Mexico State University in 2011 and currently boasts over 600 online members who sign up on the organization website. Funded by the National Geographic Education Foundation of the National Geographic Society, each of the 54 alliances are required to go through a strategic planning process that will result in their long-term viability.



Dr. Michael DeMers, Dr. Julia Parra, Acting Department Head Dr. Carol Campbell, Dr. Daniel Dugas, Mr. Raymond Carr, and Mr. David Silcock hosted the first meeting, which was held in Breland 185. Mr. Jeff Goebel, the NMGA consultant, coordinated a series of uplifting and informative experiences. The morning activities were shared by the NMSU Provost Dan

Howard, Associate Dean Ken VanWinkle, and Curriculum and Instruction Department Head Jeanette Haynes Writer. Participants also included K-12 educators, faculty and graduate students in education, members of the New Mexico Public Education Department (PED), and Dr. Kurt Wurm of the New Mexico Geographic Information Council (NMGIC) and NMSU Surveying Engineering. Even a former coordinator of NMGA participated. A major outcome of the meeting was the formation of a core team with a shared vision to improve geography education and geographic literacy throughout the state. The Alliance plans three or four future meetings across the state to increase representation and to create an organizational structure that will sustain the goals of the organization.

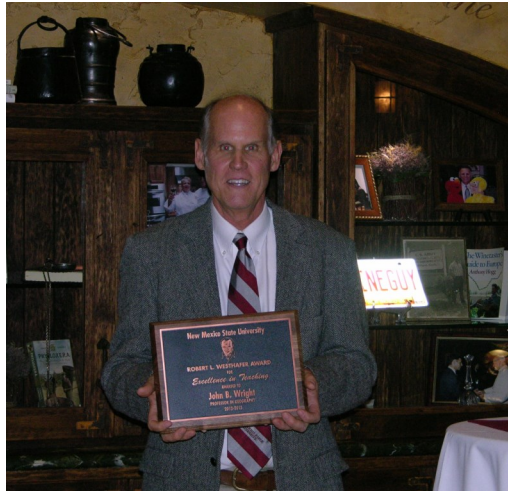


<http://nmgeoed.org/>

## Jack Wright's Awards

Awards given to Dr. Jack Wright are The Donald C. Roush Excellence in Teaching Award, Westhafer Award for Excellence in Teaching, which is NMSU's highest faculty honor and the Regent's Professorship Award for overall career achievement.

There are only 20 total Regent's Professors at NMSU at any time. So, this is a rare honor.



Dr. Jack Wright

***"I am thrilled and humbled by these recognitions. They shed a bright light on the Geography Department where I am only one of seven professors. These awards recognize the importance of Geography at NMSU, the discipline, and the major."***



Jack Wright honored in reception at the NMSU Bobby Lee Lawrence Academy of Wine. Previous winners of the award and department faculty members attended. Left to right: Michelle Schuster (previous Roush award Recipient), Dr. Christopher Brown, Dr. Michaela Buenemann, Dr. Michael DeMers .



## ***Coffee with the Deans*** *Photographs by Carol Campbell*

The Geography Department proudly hosted Coffee with the Deans in the SpARC Lab on December 4, 2013. All the department faculty who were not teaching attended. The food, coffee and collegiality were enjoyed by all!

Kudos to Susan DeMar for putting the spread together and making us look good.



Nancy McMillan and Jack



Department heads, Deans , faculty and University representatives enjoyed coffee and refreshments while the fall semester wound down.

Michaela Buenemann,

Lisa Bond Maupin and Neil Harvey.

**Homecoming celebration** Photographs by Carol Campbell



Liz Ayarbe, Kristen Hestir, and Gaurav Thapa (seated)



Jack Wright with Buddy and Anne Clark

On October 22, 2014, the Department hosted our annual alumni reception as part of NMSU's 2014 Homecoming celebration, ***A Wild West 2013 Homecoming***. We moved outside of Breland Hall this year, taking advantage of the wonderful courtyard outside Skeen Hall to host a wine and cheese reception. Approximately 30 people attended, and it was a treat to reconnect with our alumni and gather with faculty, staff, students, and some potential new students to the Department. Alumni from local area government offices and other employers turned out. This was a great reminder of the wonderful students we have been fortunate to have in the Department and the great work they are doing in their professional arc after their time at NMSU. We look forward to seeing even more of our alumni at next year's event!



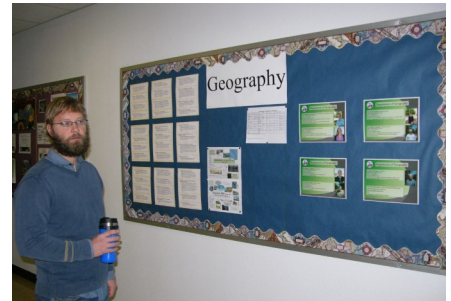
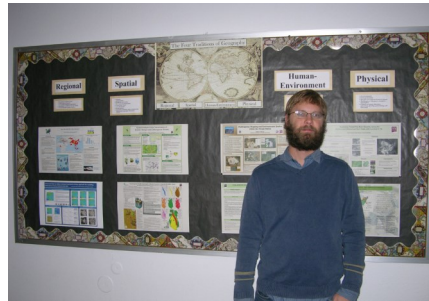
Michaela Buenemann, Bob Sabie and Christopher Brown



Christopher Brown, Frank Fiore, Jack Wright, James Coburn (visiting prospective MS student)

## ***Student Organizations***

### **GTU and Geography Faculty**



GTU Updated two of the bulletin boards with current course descriptions and biographies of the Faculty.

### **All Geography Clubs**

#### **Geography Graduate Student Organization (GGSO)**

A social club within the geography department or graduate students within the Geography department. The club often teams up with members of the undergraduate geography club for intramural sports on campus. For more information contact Robert Sabie at [rpsabie@nmsu.edu](mailto:rpsabie@nmsu.edu).

GGSO has been meeting off campus every other Thursday. The social events continue to have great turnouts. The informal meetings offered breaks from research routines, but also provided a relaxed environment to discuss thesis topics, issues with classes, and geographic brainstorming sessions.

#### **Undergraduate Geography Club**

A social club for undergraduate students within the Geography department. Main activities within this club include socials, intramural sports, study groups, and hiking trips. For more information contact Johnny McGlone at [magnus@nmsu.edu](mailto:magnus@nmsu.edu)

#### **American Society of Photogrammetry and Remote Sensing**

The NMSU student chapter of ASPRS is intended for anyone with an interest in geographic information science & technology (e.g., remote sensing, photogrammetry, geographic information systems). Discussions are held monthly regarding these subjects. For more information contact Rebecca Richman at [r-richman@nmsu.edu](mailto:r-richman@nmsu.edu).

#### **Gamma Theta Upsilon (GTU)**

An international honor society in geography. Members must have met academic requirements and shared background interest in Geography. For more information contact Robert Sabie at [rpsabie@nmsu.edu](mailto:rpsabie@nmsu.edu).

Fall semester has been productive for GTU. Members updated two of the department bulletin boards. One of the bulletin boards now illustrates the four traditions of geography and provides examples of students' research within each of the traditions. The other updated board has current course descriptions and biographies of the faculty. The goal of updating the boards is to generate student interest in pursuing geography degrees. GTU is in the process of planning a fun geography event for Big Brothers/Big Sisters for sometime in the spring. The club has continued serv-

## 2013 Fall Geography Awareness Week

### Activities

- **Nov 16** - Hike the Pine Tree Trail
- **Nov 14** - Resume Workshop

### 2013 Fall Speaker Series

- **Nov. 14 - Staci Murphy**

“Pathways to Population Stabilization and a Healthy U.S. Economy”

- **Nov. 15 - Bob Czerniak**

“Traveling Alaska’s Highway”

- **Nov. 18 - Randy Carr**

“GIS and the Cloud - New Approaches to the Server GIS Data”

- **Nov. 19 - Julia Parra**

“Improving Teaching (& Having Fun!) With i-Pads in the Classroom”

- **Nov. 20 - Rusty Stovall**

“How my Geography Degree from NMSU Launched my Career and More”



## Geography week Presents : The Speakers Series

### Dr. Robert Czerniak

"Traveling Alaska's Highway"

NMSU Geography Professor, Retired 2012

Friday, November 15, 2013, 3:00-4:00pm

Breland Hall Room 185



(Left to right: Bill Gribb, Bob Czerniak, Anne Gribb, Beth Czerniak on the Alaska State Ferry)

On November 15, 2013 Dr. Robert Czerniak gave a talk as part of the department speaker series on traveling the highways of Alaska. He focused on three of the main thoroughfares of the state including: The Parks Highway (Anchorage to Fairbanks), the Richardson Highway (Fairbanks to Valdez), and the Inner Passage (Ketchikan to Skagway). He traveled the first two highways in 1989 and the last one this past summer.



(Jack Czerniak, 1939)

Dr. Czerniak's first trip to Alaska was taken with his close friend and colleague Dr. Bill Gribb from the University of Wyoming. In addition they traveled with Bob's dad, Jack, and his friend Art Watson. Jack and Art lived as sourdoughs in Alaska in 1938 and 1939. Dr. Czerniak said that his Dad's stories about Alaska were one of the things that influenced him to become interested in travel and geography. They visited a seaplane subdivision, drove by Mount (McKinley) Denali, and the Heritage Park in Fairbanks.

Czerniak and Gribb wanted to revisit Alaska since the 1989 trip so this past summer they took their wives, Beth and Anne, and rode the Alaska State Ferry through the Inner Passage. Of course the Inner Passage is a sea passage. It is an officially designated National Scenic Byway by both the state of Alaska and the U.S. Department of Transportation. Using the ferry gave a great deal of flexibility in planning a trip because you can get off and on when you want to rather than following a strict schedule which is required by the cruise lines. As a result they were able to spend a few days in Skagway, as well as a few days in Juneau, where they saw the Mendenhall Glacier (20 minutes from the Juneau CBD) and visited a historic Russian Orthodox Church.



Mendenhall Glacier Outside Juneau, Alaska

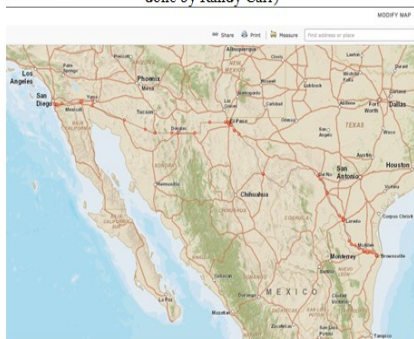
## What's happening in the SpARC Lab of late? *Contributed By Christopher Brown*

The end of 2013 and the start of 2014 found SpARC staff members quite busy wrapping up some existing projects while also starting work on new projects and continuing work on others.

Projects that we have recently finished up include the BINS/BGIS work we have been doing for the last 10 plus years to support the Joint Working Committee on Binational US-Mexico Transportation Planning for the Federal Highways Administration and also a project for the Border Environment Cooperation Commission (BECC) that explored the risk to the region's aquifers due to onsite wastewater treatment systems. The BINS/BGIS work resulted in a binational data portal that we are hosting on the lab's server, and we will be putting a project summary for the BECC project up on our server shortly.

Ongoing projects include some work we are doing for Dona Ana County to support the Viva Dona Ana sustainable communities planning grant the County has with the US Department of Housing and Urban Development. The goal of this work is to help stand up a regional GIS&T Users Group and Data Portal, and we

ArcGIS Server map showing US-Mexico Ports of Entry for BINS/BGIS Project (Map done by Randy Carr)



are hoping to have a prototype of the Data Portal that utilizes ArcGIS Server and ArcGIS Online technologies stood up in the very near future. We are also continuing our work for BHP Billiton, a large mining company with operations in the Farmington region. In this project, we are monitoring and modeling Selenium in various reaches of the San Juan River and the region's irrigation districts.

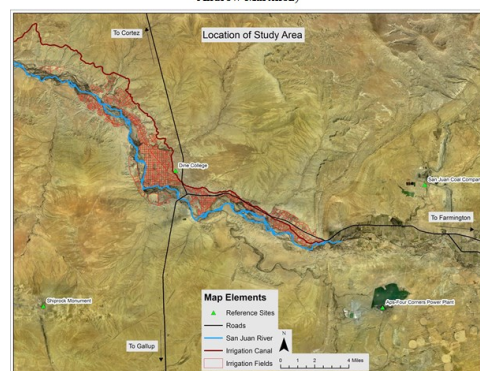
New projects include a project with the US Forest Service that examines landscape scale patterns of fire and drought in the Great Plains that is especially noteworthy; this is a project that a new MS student in the Department, Charles Jack-

Portal for the Viva Dona Ana GIS&T Data Portal (portal done by Randy Carr)

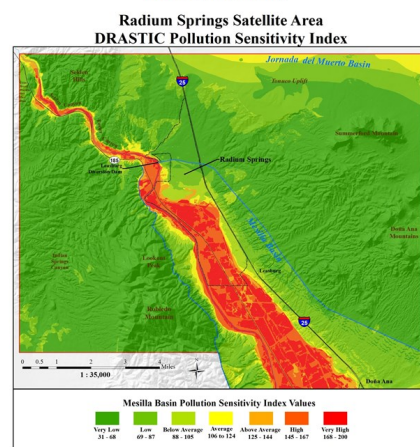


Laboratory is alive and well, and the staff members are busy and productive. We will keep you posted as to ongoing work in future issues of our newsletter.

Map of the study area for San Juan River Watershed Selenium Study (Map done by Andrew Martinez)



GIS output from BECC project on aquifer vulnerability due to onsite wastewater systems (Map done by Steve Walker)



Geography Department  
New Mexico State University  
MSC MAP/ PO BOX 30001  
137 BRELAND HALL  
Las Cruces NM, 88003-8001

## WE'RE ON THE WEB!

<http://geography.nmsu.edu/>

NMSU DEPARTMENT OF GEOGRAPHY  
LAUNCHES ITS OWN FACEBOOK PAGE!

THE NMSU DEPARTMENT OF  
GEOGRAPHY HEARTILY INVITES ALL  
STUDENTS, FACULTY,  
STAFF, AND ALUMNI TO  
VISIT THE PAGE, CHECK  
OUT WHAT IS HAPPENING  
WITH THE DEPARTMENT,  
AND SHARE SOME NEWS  
OF WHAT IS GOING ON IN  
YOUR WORLD. WE HOPE  
TO SEE YOU THERE!



HTTP://WWW.FACEBOOK.COM/  
PAGES/NEW-MEXICO-STATE-  
UNIVERSITY-DEPARTMENT-OF-  
GEOGRAPHY/109764555756575

NEWSLETTER EDITOR  
DR. CAROL CAMPBELL

NEWSLETTER PRODUCTION  
ASSISTANTS  
BRENDA WARD  
SUSAN DEMAR

ARTICLES CONTRIBUTED BY  
NMSU DEPARTMENT FACULTY, STAFF,  
AND ALUMNI .