Dr. Bonnie Warnock, Department Chair and Associate Professor in the Department of Natural Resource Management will be offering a new Introduction to Field Studies course integrating outdoor learning with studying the natural and physical sciences. (see also page seven)

The course, NRM 2203, “Introduction to Field Studies,” is a five-day intensive orientation to basic field studies techniques and methods that will give students the opportunity to learn to live, work and study safely in the unique conditions of the Chihuahuan desert. The course will cover topics including field safety, first aid, camping and hiking basics, keeping a field journal and use of field equipment such as a compass and GPS. The course will also introduce students to basic field science topics including plant and wildlife identification, astronomy, geology, and more. Faculty from Sul Ross conduct an array of research in the Trans Pecos spanning the fields of natural resource and wildlife management, biology, botany, geology and hydrology. The course is designed to give students who are interested in field studies and research an opportunity to strengthen their outdoor knowledge and skills for later involvement in field-based studies and research.

The development and piloting of the course is sponsored by the Adelante Tejas project. Adelante Tejas is a cooperative partnership between Sul Ross and San Antonio College funded through the Department of Education to promote participation and strengthen instruction in the sciences. It is 100% funded by DOE Award Number: P031C110039.
SRSU Students and Researchers Help Relocate Desert Bighorns

By Steve Lang

The most recent desert bighorn capture, held December 18-20 at Elephant Mountain Wildlife Management Area in south Brewster County, is part of a collaborative effort to relocate desert bighorn sheep.

During the aerial capture, 44 desert bighorn were taken from the Elephant Mountain WMA and relocated to the 9 Point Mesa, about 30 miles away. Goal of the ongoing project, under the direction of the Texas Parks and Wildlife Department, is to restore the bighorn population to 3,000 animals throughout eight mountain ranges in West Texas.

Desert bighorn, estimated at 3,000 animals in the mid-19th century, virtually vanished from the region by the late 1950s. Restoration efforts began over 50 years ago, starting in Black Gap WMA, which borders Big Bend National Park. Desert bighorn were brought in from other states to begin, and the population has rebounded to nearly 1,500 sheep. By the year 2000, surplus animals were relocated to other sites.

Sul Ross students and researchers, through the Borderlands Research Institute, have been active in data collection by using radio collars. The research evaluates the success of the restoration, examining dispersal, mortality and site fidelity, or determining if the bighorn remain in the general area where released.

The Bighorn relocation is also part of an in-progress documentary for the Discovery Channel. The documentary, now in production by the Biscuit Factory of Falls Church, Va., may air in fall 2013, according to Rob Lyall, director of photography. (Photo by Steve Lang)
Criminal Justice Students and Law Enforcement Academy Cadets Practice Outside

Law Enforcement Academy cadets in Lloyd Dragoo’s Bravo ‘12 class practice “felony stops” and issuing tickets in the parking lot.

State Troopers instruct Criminal Justice students in Russell Scown’s Police Systems and Practices class about new helicopter technology.

Although many of their classes are on-line, depending on the class, the Criminal Justice Department offers several classes in which opportunities abound for students to have “real world” and hands-on experiences.

The Law Enforcement Academy cadets receive rigorous training in all areas of policing. The intense Texas Commission on Law Enforcement Standards and Education (TCLEOSE) training lasts for 18 weeks. After a cadet completes the academy and passes the TCLEOSE exam, they are eligible to work for any law enforcement agency in the State of Texas.

Dr. Robert Hunter and students in his Forensic Ballistics class practice firearms identification and terminal ballistics at the Sportsman Club Range.
Students Encouraged To Embrace Local Volunteerism

By Joseph Velasco

Selma Johnson, the Sexual Assault Prevention Intervention Program (S.A.P.I.P.) Coordinator at Freedom Horses (Weatherford, TX) was hosted on September 20th by Dr. Joseph G. Velasco’s advanced course in relational communication. Ms. Johnson’s presentation focused on volunteerism and creating environments of social support for/by those affected by trauma and family violence.

Following her presentation, Selma and seven Advocates from the Family Crisis Center of the Big Bend, engaged Dr. Velasco and his class in an important discussion of issues surrounding volunteerism, coping, and resilience. This marks the second event which is part of a recent initiative to build a relationship between Sul Ross State University and the Family Crisis Center of the Big Bend. In the spirit of outdoor learning, this event brought together professional practitioners of family crisis intervention to the campus of Sul Ross State University, thereby transforming the classroom experience of Sul Ross State University by injecting outside educators.

Hands-on Practice in First Aid

Although not “outside” this situation is definitely a “hands-on” assignment in Baseball coach Bobby Mesker’s first-aid class. According to Mesker, “The students are given real life scenarios and are required to act accordingly. In this case, two students come upon an unconscious victim. After the initial check and call, one student starts CPR while the other one runs to get the AED machine.”

In addition to the Physical Plant’s efforts to recycle white paper, Student Government has placed recycling bins in the UC. Joining them are the Conservation Biology Club and Student Recycling and Service. Staff Council is also helping to push recycling on campus.

Newest library books purchased for QEP

- Quality Lesson Plans for Outdoor Education (796.507 R318Q)
- Outdoor Program Administration (790.069 094H)
- Technological Nature (303.483 K12T)
- Ecopsychology: Science, Totems, and the Technological Species (155.91 E19)
- Bicycling Science (629.2272 W747B)
- Instituting Nature: Authority, Expertise, and Power (333.7516 M429I)
- Governing the Tap (363.610973 M959G)
- Companions in Wonder: Children and Adults Exploring Nature Together (508 C737)
- Confronting the Coffee Crisis (338.17373 C748)
- Recycling Reconsidered (363.72820973 M119R)

CAMPUS RECYCLING

English Grad Students Study Place and Literature of the Big Bend

Grad students present their research on the site where it happened: here hunting in the Davis Mountains and teaching (and playing) at the Terlingua School.

River Rat, Keith Bowden, and author of The Tecate Journals, discussed his Writing with the same class of English Grad Students.
Geology Students Enjoy the Best Rocks and River in the World

By Leslie Hopper

Located in the southern foothills of the Davis Mountains, where the Rockies meet the Ouachitas, the campus is ideally situated for studying the diverse geology of the Trans Pecos region of Texas and New Mexico. Sul Ross' proximity to Big Bend National Park and Big Bend Ranch State Park permit the study of diverse depositional styles and formations, which have occurred over a vast interval of time. The added dimensions of understanding hydrology in the arid, bi-nationally significant Rio Grande watershed, historic and modern mining and Permian Basin petroleum enterprise make for a prolific research and educational setting.

Dr. Kevin Urbanczyk, Director of the Rio Grande Research Center and Professor of Geology, here in Visegrad, Hungary with the Danube river in the background.

Geology Prof Inspects European Rivers

Dr. Kevin Urbanczyk, Director of the Rio Grande Research Center and Professor of Geology, here in Visegrad, Hungary with the Danube river in the background.

Urbanczyk was taking part in a planning meeting with representatives from IHLET.org (an International River Basin group) to discuss the logistics of an upcoming meeting that will unite representatives from 12 river basins from around the world. The IHLET group is committed to improving environmental and social conditions in these river basins.

Urbanczyk also claims to have hung out with former professional soccer players and Hungarian politicians, lounged in the thermal spas, and enjoyed the cuisine and beer of a foreign country. But the QEP Ed is not sure if that part is true. or if he is just trying to appear to be less of an academic nerd. One never knows with Dr. U.

Trail Work

Various Hill clubbers and townspeople in Fresno Canyon, Big Bend Ranch State Park working a trail in preparation for BikeFest Weekend race.

Geology graduate students Stacy Sawyer and Dominick Percoco from the Advanced Paleontology class examine a fossil site in south Brewster County. Steve Wick (left), who is a graduate student at Sul Ross as well as a paleontologist with Big Bend National Park, explains the processes involved in extracting fossil bones from the rock. (Photo by Dave Rohr)
Chihuahuan Desert Bike Fest Feb. 14-16, 2013
New Tri-fold brochure

The new brochure explains the Geology of the Rincon Loop, a tour of the lower end of Fresno Canyon, which will be led by Geology professor, Kevin Urbanczyk, who also created the trifold.
Harrison joins Center for Big Bend Studies
By Kitty Sibayan for The Skyline

Meet Amber Harrison, the newest addition to The Center for Big Bend Studies at SRSU. Her hope is to enlarge SRSU’s anthropology program to the point that an anthropology major can be offered in the future. Currently, a minor in anthropology is offered at Sul Ross.

Starting spring 2013, she has scheduled the first three courses: Introduction to Anthropology, Cultural Anthropology and Rock Art (providing an anthropology or art credit).

Harrison earned her M.A. in anthropology from Wichita State University and taught anthropology at the University of Nevada, Las Vegas. After completing her formal studies, she began gaining practical experience using her skills in osteology, which is the scientific study of bones.

She has worked on two cemetery recovery projects, one in Los Angeles, CA and the other in Tucson, AZ. On the Tucson project, she recovered and analyzed over 100 individuals. She has worked on both prehistoric and historical-period projects in places like Rapa Nui (Easter Island), Mexico, Cyrus, and the Southwest US.

Harrison has a passion for reconstructing the stories of the past. In her spare time, she would like to begin mapping and creating records of the many unmarked graves found in the area.

ANRS Receives $245K Grant from Dixon Water Foundation for Sustainable Cattle Development

Dr. Scott Ericsson and Dr. Bonnie Warnock have received a five-year, $245,370.26 grant from the Dixon Water Foundation to develop a sustainable breed of cattle through utilization of traditional Hereford genetics.

This project will utilize Hereford bull semen frozen since the 1960’s, donated by the National Animal Germplasm Program, to artificially inseminate the Sul Ross cow herd and the Mimms Ranch cow herd. Production traits and carcass merit will be assessed during the grant period to ascertain the feasibility of developing a biological type of cattle for a sustainable grass finished cow-calf operation.

It is envisioned that, at the end of this project, there will be two nucleus herds in which bulls can be produced as herd sires for crossbreeding in a commercial grass finished cow-calf operation.

Sustainable beef production requires that a specific biological type of cattle (puberty, calving ease, mature weight, rebreeding, and longevity) be matched to the most economically available feed resources. Generally the “most economical” feed resources would be grazed forages rather than harvested or supplemented feeds. The majority of the market cattle produced in the United States are fed concentrates in the feedlot prior to harvest. This method of beef production is not sustainable due to the rising costs of energy, increasing price of corn, and reduction-contamination of underground water supplies.

Diet-health perceptions have raised consumer demand for grass-finished beef as there is some evidence that grass-fed beef might have some health advantages over grain-fed beef. The environmentally friendly and reduced animal welfare concerns of grass-finished beef production, when compared to grain-fed beef production, have also increased consumer demand for an entirely grass-fed beef product. (from The Skyline)
Warnock Sets Fire to West Texas...but Keeps Her Cool

Bonnie Warnock, winner of the 2012 Outstanding Teacher Award, grew up on a ranch in the Trans-Pecos, where her family has been ranching since the 1890s. She developed a passion for the ranching industry, nature and the outdoors as a young child. This led her to pursue an education in Range Science and related fields. As she learned more about her chosen field, she began to concentrate on the function of ecosystems and how to restore functionality to degraded ecosystems.

Today, always smiling, she oversees a very active research program with projects focusing on restoration, plant ecology, and fire ecology. Fire is one of the tools she uses regularly to bring back green grass.

“There is a lot of support for prescribed fires by ranchers,” she says, but “We need to educate small landowners living on the edge of towns.” She explains that these small landowners, a “new breed” of people who have moved to the desert grasslands from the cities seldom understand or accept the benefits from controlled burns. They are also at the highest risk from wildfire.

Since 2001, Warnock has been teaching many of the Range Science classes in the Department of Natural Resource Management and currently serves as Chair of the department. She is also a co-advisor for the nationally recognized Range and Wildlife Club at SRSU.

She is married to Seth Warnock, who also has a strong agricultural background and a long family history of farming and ranching. They stay active in production agriculture through their small ranch in the Marathon grasslands and by helping out with the family agricultural enterprises.

Warnock and students have never had one of their controlled burns get away...so far.

New tri-fold brochure for Warnock’s new Field Studies course

McNair Scholar Kitty Sibayan gives a poster presentation about the nationally famous Rock House Fire, which was a very uncontrolled wildfire. She used a Landsat satellite image of the fire on day 34 and then inserted pictures pin-pointing the location where the photo was taken. She collected close to 200 gigabytes of documents and photos (close to 5000 photos) from the state, federal and local agencies involved in the fire. She is available to lecture on the topic! Sul Ross’ McNair Scholars showcased their research at the fifth annual McNair-Tafoya Symposium on Oct. 24.
Student members of the Skyline Staff and The Eyes of Nature Photography Club pooled their skills to create a beautiful West Texas Calendar to sell to the campus community.

Student members of the Conservation Biology club joined forces with the Chihuahuan Desert Research Institute to Present an evening under the stars.

Student Lands U of Kentucky Soil Internship

By Steve Lang

Joey Van Noy’s soil research carried him from ranch land south of Alpine to the University of Kentucky. Van Noy spent the summer in the Blue Grass State working on two UK research farms and in a soil microbiology, ecology and biochemistry lab.

The Sul Ross State University senior was making a presentation at a McNair Program conference at the University of Maryland this past March. “I attended a graduate school fair after making an oral presentation (on baseline carbon levels in Trans- Pecos grasslands), and the first recruiter I met was from the University of Kentucky,” he said. The recruiter referred Van Noy’s research to Dr. Mark Coyne, UK professor of Plant and Soil Sciences. Following about a week of correspondence, Van Noy was offered a summer internship in Coyne’s laboratory.

“At UK, I helped to design and initiate several projects (involving soil sampling),” he said. “I was probably running up to five research projects at one time, so it was pretty hectic.”

“We tried to get Joey exposed to as many different techniques in soil microbiology as possible,” Coyne said. That included soil sampling, nutrient analysis, and urease enzyme assays; as well as to make media, isolate, and enumerate bacteria and fungi from turf soils that were suffering from brown spot.

Sul Ross student Joey Van Noy (left) and Dr. Mark Coyne, University of Kentucky professor of Plant and Soil Sciences, at grassland research plot. Van Noy, who hopes to earn a Ph.D., has already experienced the flexibility of location that the study of soil science affords. “With soil (science background), I can go anywhere in the world I want,” he said. “It is important to me to have that freedom to travel.” Photo courtesy Joey Van Noy.
**Museum Exhibits Archaeology**

“Removing the Shroud of Mystery: Archaeology in the Big Bend” opened Sept. 8 in the Museum of the Big Bend. The exhibit was a partnership between Humanities Texas and the Center for Big Bend Studies.

Found across the vast region of the Big Bend region of Texas are clues left behind that help tell the story of the “First Texans.” Some of these sites can be traced back more than 10,000 years, and they tell about people that had complex cultures that successfully adapted to changing environments, climates and food sources over their many centuries of occupation in the region.

Since they left no written record, understanding of this past relies on the scientific study of what these early peoples left behind - tools, shelters, clothing, bones, food, and even artwork.

**Enjoying a Fall Meal on the Mall**

Students, staff, faculty, and administrators bond during a beautiful fall day of fun and food on the mall. New Freshmen are all wearing their new red t-shirts.

---

**Students Perform Shakespeare Excerpts During a Fall Fort Davis Garden Party**

**By Kaitlyn Wood (The Skyline)**

SRSU Students performed excerpts from two Shakespearean dramas at a Hotel Limpia garden party on Sept. 9. Excerpts included “Midsummer Night’s Dream” and “The Merchant of Venice” in the style of street theatre.

The garden party included live music from the Elizabethan time period performed by Marina Azar and Betty McGhee. Fort Davis High School students also performed an original play, “The Ruckus,” by Zena Zeller.

Complimentary canapés were served as light refreshments with a suggested meal at the buffet at the Bistro, located in the hotel, with a cash bar.

The event was free of charge and put on by the Friends of the Jeff Davis County Library.

The event helped audiences get out and enjoy the beautiful scenery that West Texas has to offer with perfect weather and wonderful entertainment to go along with it.
Art Walk 2012

**Students Make A Deal for Art Walk 2012**

Sponsored by the SRSU Art Club, student artists made a “deal” with the Sibley Gallery on Holland Avenue. In trade for repainting the gallery, students were allowed to hang and display their art in the gallery during the 2012 Art Walk.

Art Walk is an annual Alpine city-wide art festival held in November. This is the 17th year that SRSU Art Department has been participating. (photos by Alex Costea)

**Art Class Visits Chinati Foundation**

Carol Fairlie’s Seminar in Professional Art Practices listens to Chinati Foundation Director of Conservation, Bettina Landgrebe, explain meeting the challenges of repairs to Claus Oldenburg’s sculpture, “Ode to the Last Horse” on the Chinati grounds in Marfa. Oldenburg is famous for his overly large soft sculptures. Landgrebe’s challenge with this particular sculpture, made of foam, was to preserve it while allowing it to age properly in West Texas sunlight.
Faculty Seminar Grows to 32 Members

Sept. 7: Members participated in an opening “icebreaker” introducing themselves and then had one minute to share a teaching tip or something they use in class that works. Here is a very brief sample:

- **Grant (Kinesiology)** uses clickers to get feedback from classes.
- **Sawyer (Fine Arts and Communication)** teaches Stage Combat outside, including a wheelchair-bound student.
- **Fairlie (Fine Arts and Communication)** writes basic rubrics for all class assignments. Students use them for peer grading.
- **Velasco (Fine Arts and Communication)** uses prompts for students to use to talk about themselves.
- **Kuenstler (Vocational Nursing)** sets up teams and the teams have team captains. Students take 70 to 80 tests per year and all tests are timed. They use rubrics to grade themselves.
- **Estepp (Range Animal Science)** starts every class with an interest approach. Classes are all discussion based. He walks in with a stat at the beginning of class to open discussion.
- **Housewright (Range Animal Science)** has students critique refereed journals and uses many real-world, hands-on examples in class.
- **Stein (Academic Center for Excellence)** helps new writers open up by developing their ability to describe using the five senses at the Outdoor Classroom.
- **Sager (Languages and Literature)** sets up a diagram with four squares listing requirements to pass the class. He assures students that even if they fail one of the four squares they’ll still pass the class.
- **Zamora (Languages and Literature)** uses questions to make class members participate and stimulate better responses.
- **Qvarnstrom (Education)** has students introduce themselves to the rest of the class with a positive adjective to help them remember names.
- **Mazie Will (Business Administration)** uses case studies and mock face-to-face, telephone, and teleconference interviews to practice for the business world.
- **Brown (Computer Science and Mathematics)** allows students to replace their lowest grade with a paper. Students found the choice engaging and interesting.
- **Garcia (Kinesiology)** teaches a first-aid class that contains mostly freshmen. Students are sent out on campus to find first-aid kits in each of the buildings and to make sure the required items are present.
- **Garcia (Kinesiology)** partners with the Alpine School District to get hands-on experience working with young children for his students.
- **Paul Wright (Behavioral and Social Sciences)** had to learn new things (for example, Distance Ed and Power Point).

Sept. 21: Members heard a “2012 State of the QEP Address” including a brief history of SACS requirements and how outdoor learning and critical thinking were chosen as our QEP, where Sul Ross has probably exceeded requirements, and what are areas of concern. The presentation concluded with suggestions for faculty.

October 5 – Kathy Stein, Director of ACE, presented “Intellectual Standards and Hostages.” Stein teaches English 1302 and sets the tone at the beginning of the semester for what students need to achieve. She uses intellectual standards (clarity, accuracy, precision, depth, breadth, logic, significance, fairness) to help students set up standards of judgment.

Oct. 19 - Dr. Donald Freed, Professor of Music, treated faculty seminar to an excellent demonstration of a great teacher at work: diagnosing student problems and helping the student experience the difference between singing with a problem and singing without it. The student explained how Freed’s method made her excited to learn because she could feel herself improving. Freed was even able to work in a little “outdoor learning” by asking the student to interpret one line in the song that was about trees.

Nov. 16 - Dona Roman, Professor of Theatre, presented “Drawing Upon the Right and Left Sides of the Brain.” She described how critical thinking is being utilized with the new gaming degree which merges computer science and mathematics with fine arts, thus tapping into the resources of both left- and right-sided brain functions.

Jan. 25 – Students Kitty Sibayan (History), Jonathan Navarrete (Biology), Alexandria Lee (Environmental Studies), and Virginia Chavaria (Art) talked about their pro and con experiences with outdoor learning and answered faculty questions.

**STUDENT PANEL**

For more information on these programs or past Faculty Seminar programs see [http://www.sulross.edu/pages/6700.asp?directory=%2Fdocs%2Fqep%2F2012-2013&Submit=Go](http://www.sulross.edu/pages/6700.asp?directory=%2Fdocs%2Fqep%2F2012-2013&Submit=Go)