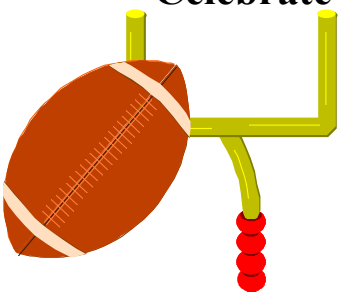
30 Annual Newsletter
(Fall 2007)
Department of Biological Sciences
Sam Houston State University

HOMECOMING!

Celebrate Homecoming with us on Saturday, October 20, 2007



Homecoming Activities

(See http://www.shsu.edu/homecoming/ for details of SHSU Homecoming)

Thursday, October 18
6:30 pm Homecoming Parade- Sam Houston Avenue

Friday, October 19
6:00 pm Distinguished Alumni Gala- LSC Ballroom

Saturday, October 20
11:00 am Pre-game with the President- Austin Hall
12 noon SHSU Tailgate Party Bearkat Alley- Bowers Stadium parking lot
2:00 pm Football Game SHSU vs Northwestern State -Bowers Stadium

5:00 p.m. **Department of Biological Sciences Homecoming Barbecue, rain or shine, at the home of Dr. Jimmie Long, 3352 Winter Way, Spring Lake Subdivision (located one mile west of I-45 on FM 1374). Sponsored by Department faculty and staff. No charge.**

Notes from the Chair

Taking Stock

For those of us in education, *assessment* is an emotive word. On the one hand, it can simply mean looking back over the year, figuring out where you are, what has been accomplished, and where you hope to be 12 months from now. The annual newsletter feature "Notes from the Chair" typically illustrates such thoughtful reflection. On the other hand, the term assessment, when coupled with end-of-course exams, merit evaluations, or university re-accreditation, can be uttered as venomously as a four-letter word. As I sit working on my "Notes," Sam Houston State University is in the beginning throws of its laborious, decennial re-accreditation process with the Southern Association of Colleges and Schools (SACS). I hope readers will thus understand my preoccupation as I serve up a Neapolitan scoop of assessment.

Let me start with the sweet stuff, that is, my reflections since the last newsletter. It has been another wonderful year in the Department of Biological Sciences here at Sam Houston State University. Our faculty continue to excel, publishing at twice the national average for comprehensive universities, competing successfully for prestigious, high-dollar grants from NIH and NSF, and serving as editors for national and international journals. More importantly, these outstanding scholars eagerly bring their research successes back to the students in their classrooms, in their labs, and out in the field, literally infecting their charges with the joy of discovery. Truly, the best measures of our success are the accomplishments of our students. And it has been stellar year for our apprentices, these budding young scientists, educators, parents, public servants, and problem solvers. Their triumphs are presented in more detail later in the newsletter, but include: numerous scholarly awards at state, regional, and national meetings; a major award for our Tri-Beta Honors student organization; and successful grantsmanship, at the national level, by several of our undergraduates. The chocolate syrup covering this bite of ice cream is a rumor that Biology is now "on the radar" for a new building. And the cherry sitting atop the sundae is an extremely generous donation to the James Long Scholarship Fund from the estates of Ms. Merry Berry and Ms. Pauline Woods. Because of the generosity of our alumni and friends, the department annually awards over $40,000 in scholarships to deserving undergraduates and graduate students in the biological and environmental sciences. We owe you all a heartfelt thanks.

The department experienced several bittersweet transitions this year. We said goodbye to Dr. Ted Brummel and his family. Ted was an excellent geneticist, having post-doc'd with Nobel candidate Seymour Benzer at Caltech. After three years here at SAM, the Brummels were lured away by Long Island University in New York. We wish Ted and his family the very best. We almost had to say goodbye to two pillars of the department, Dr. Harold Foerster and Dr. Everett Wilson. After 43 and 45 years of esteemed service, respectively, Harold and Everett both took half-time retirement. This means that instead of working 60 hours a week while being paid for 40, they still work 60 but only get paid for 20. The department and our students continue to benefit from the talent, dedication, and experience of these two exceptional mentors. On a related but exciting note, the department has embarked on two national searches, one for a geneticist, and the other for a microbiologist. We hope in next year's "Notes" to be welcoming two young and productive teacher-scholars into our biology family.

Ok, so what about the sometimes unpleasant taste of assessment? Turns out its not so bad after all. I would be dishonest if I said SACS re-accreditation was fun, as meeting this agency's requirements often involves mind-numbing hours of fruitless busy work. But there are benefits to an occasional spoonful of molasses, to a deep and truthful evaluation of our mission, of our programs, of our product, and yes, even of the tools we use for assessment. One tool we have

failed to use effectively is the experience that you, our alumni, have gained since graduating from SHSU. In taking stock of our programs and curricula, we have never formally solicited your feedback and advice. We are going to correct that error. We will soon be posting to our web site, and will distribute as hard copy at the Homecoming Picnic, an alumni survey. If you graduated with a degree in either biology or environmental science from SAM, last year or last century, please take a few minutes to reflect upon your experience. Let us know what aspects of our programs were good and shouldn't be changed, which were ineffective and should be modified or deleted, and what new courses/technologies/approaches we should consider adopting.

I hope to see you all at the picnic!

Dr. Matthew Rowe
Professor and Chair
Department of Biological Sciences

Mindy Estes (BS Biology, 1974) Honored as SHSU Distinguished Alumna

(From Julie May of the SHSU News Service, October 13, 2007)

Five Sam Houston State University graduates who have brought pride to the university through their contributions to business, humanitarian efforts, the medical profession, and public service will be honored as Distinguished Alumni on Oct. 19 as part of the university's 2007 homecoming festivities.


Melinda L.Estes

San Antonio native **Melinda L. Estes**, M.D., has served as president and chief executive officer of Vermont's Fletcher Allen Health Care, a 562-bed facility whose 6,000 employees provide care to nearly one million people in Vermont and northern New York, since 2003. She also serves as a clinical professor in the Department of Pathology at the University of Vermont College of Medicine in Burlington.

Estes received the Bachelor of Science degree from Sam Houston State University in 1974, majoring in biology with a minor in chemistry. She received her medical degree from the University of Texas Medical Branch in Galveston in 1978, where she graduated magna cum laude.

Prior to joining Fletcher Allen, Estes served as chief executive officer, chief medical officer, and chair of the Board of Governors of Cleveland Clinic Florida. She was honored with the YWCA Career Woman of Achievement Award and was recently given the American College of Healthcare Executives-Vermont Regents' Special Recognition Award.

FASEB Summer Research Conference honors Dr. Bill Brinkley

Bill Brinkley (Biology MA 1961) writes this note for the Newsletter:
"Thank you for the invitation to the SHSU Department of Biological Sciences Annual Homecoming BBQ 2007. I hope to attend and send the following news for the for the

Department newsletter. A review of the meeting can be found in Developmental Cell 13:168-176, 2007”

The Federation of American Societies of Experimental Biology(FASEB) Presented a Summer Research Conference entitled "Mitosis; Spindle Assembly and Function." held at Indian Wells, California on June 9-14, 2007, honoring Dr. Bill Brinkley, Senior Vice President and Dean of the Graduate School of Biomedical Sciences, BCM (Baylor College of Medicine). The meeting featured over 125 participants from the U.S and other countries and included invited presentations and posters dealing with various aspects on the structure and regulation of mitotic division in eukaryotic cells. A major feature of the meeting was a special "Roast and Toast Evening" that included comments and personal accounts by friends and numerous students and trainees who worked or trained in the Brinkley laboratory during the past 45 years. Dr. Brinkley was referred to as the "father of field of mitotic spindle assembly and function" for his pioneering research on the structure and function of the mitotic apparatus, including chromosomes, kinetochores, centrosomes and spindle microtubules.”

Bill Brinkley

Bill was previously honored by SHSU as a Distinguished Alum. In a recent letter to Dr. James Long, who was Dr. Brinkley’s MA thesis director, Bill said that he reported to the FASEB conference that he saw his first real chromosome in Dr. Long’s mosquito biology lab at SHSU. At the time they were examining chromosomes in mosquito brains to aid in taxonomic questions. Congratulations to Bill for his many contributions to science and to science policy over his long career.

Student News

Eryn Pendley (Bio major, Chem minor) was awarded a $400 Grant-in-Aid-of-Research by Sigma Xi, the Scientific Research Society. Eryn used the grant to offset her expenses during two weeks of summer field work in the foothills of the Organ Mountains of New Mexico, where Eryn was studying the thermal ecology of bark scorpions. Supervising professor is Dr. Rowe.

Dr. Todd Primm reports on the following students:

Ryan Williamson, who was a research assistant for Ted Brummel and later for myself, graduated with a BS in Biology in May, 2007, and is now in the PhD program at UT Southwestern Medical School in Dallas.

James Spurlin, double major in Biology and Chemistry, is a research assistant for me currently. He not only participated in the SMART Program (Summer Medical and Research Training Program) at Baylor College of Medicine, but was also invited to stay an extra two weeks because of his exemplary performance.

Dr. Diane Neudorf reports on the following former students:

Sheena Humbird graduated with her MS in Dec. 2007. She is now working as a naturalist at Jesse H. Jones Park and Nature Center in Humble, TX.

Kelly D'Orazio (MS 2003) graduated from vet school at Texas A & M in the spring and is now working as a veterinarian in Apache Junction, AZ.

Dr. James DeShaw has been in recent email contact with the following Environmental Science graduates and passed along their information for the Newsletter:

Brooks D. Neighbors (ESC BS ~1997) is Associate Environmental Specialist with Natural Resources Planning, Turner Collie & Braden, in Houston, Texas. He reports that his company is now hiring.

Courtney Barrett (ESC BS 2006) reports that "I am working on a Master's degree in education and I'm in the process of getting a teaching certificate for 8-12 Life Sciences. Maybe that profession just runs in the family... my Dad, Aunt Leslie, and me."

Elijah Luna (ESC BS 2006) reports that "I now work for Envirotest Ltd. as an Environmental Scientist. I started on June the 11th 2007 and work under fellow Alum Jason Binford and am enjoying consulting very well. Many thanks and praises to you Dr. DeShaw, I am here now because of you."

Erle Jannsen (ESC BS ~1974) After many years in senior management positions at M. D. Anderson Cancer Center and then at U.T.Austin, Erle reports that he retired in April, 2007, and "I am moving to South Ecuador a small town, Vilcabamba, south of Loja. It is in a valley with a large number of folks from around the world retired there. I have 8 ac of fruit trees, (almost any you can think of). coffee trees, and an organic garden".

Jake Hairell (ESC BS 2000) reports "I've been working for Waste Management (in Houston) for over 3 years now and enjoying it. Everyday is a challenge!!! I was writing to see if you had any recent grads looking for work."

Kimberly Hubenak (ESC BS) is an Industrial Hygienist/Safety Engineer with Lyondell Chemical Company-Matagorda Complex in Bay City, Texas.

Mathew Burkheiser (ESC BS 1970's), who is Director of Environmental Health and Safety Services at M. D. Anderson Cancer Center in Houston, was recently honored by that institution as Heart of M. D. Anderson Outstanding Employee for August, 2007. Matt, who is working toward the Ph. D. in public health, taught Industrial Hygiene in our Department for a few years.

Megan Tallent (ESC BS) is an environmental consultant with Natural Resource Group. In August, she wrote "I have been placed in-house at one of our largest clients, Spectra Energy and I enjoy my job tremendously. I am in charge of environmental permitting for large natural gas pipelines… I am currently expecting my first child any day now, and Spectra has been great as they are letting me work from home…"

Ronnie Kallus (ESC BS ~1990) writes that "I did 7 years at DuPont and now I am consulting for Chevron. I am the Director of two business units totaling $5.5M annually in labor revenue. I have 60 folks working for me throughout the US (primarily central US) in 8 different offices."

Kurt Volkmer (ESC BS 1981) is Sales Manager at Geocycle, a firm that specializes in using hazardous wastes (solvents, waste petro-chemical products, anything with BTU value) to fire cement kilns. The high-temperature incineration not only detoxifies the wastes and powers the kilns, the process has the added benefit of reducing the cement industry's use of fossil fuels.

βββ Biological Honor Society

Tribeta had an active year 2006-2007. In the fall, we offered free tutoring for 100 level Biology classes, had our annual book sale/auction and initiated 33 regular members, 14 associate members and six graduate members. Several members presented their research projects at scientific meetings. In February, we hosted the second annual Science Saturday for 5th graders at Huntsville Intermediate School. Approximately 50 students came to the Lee Drain Building on Saturday morning. The 5th graders were organized into groups and taken to several different rooms with hands-on activities concerning animals, fruits, microscopes and GAK. After a pizza lunch and door prizes on the second floor of LDB, all tribeta members and 5th graders gathered for a group picture (below). All participants, including tribeta members and 5th graders had a wonderful time and this is now an annual event, anticipated by the next group of 5th graders at Huntsville Intermediate School. We even had a page in the Huntsville Intermediate School yearbook.

Also, in the spring, the Delta Tau chapter hosted the annual Regional convention at Lake Texoma. Eighteen students and four faculty attended the conference with most students also presenting research projects. After thunderstorms with the possibility of tornadoes on Friday night (it was pretty scary!!), the rest of the conference was beautiful weather. Dr. Chad Hargrave, one of our new tenure-track faculty members, gave the after dinner talk. Our chapter was named the best chapter in our region during the awards ceremony (photo below). Several students attended scientific meetings in the Spring, including the Texas Academy of Science meeting at Baylor and SWAN (Southwestern Association of Naturalists). Dr. Joan Hudson, Faculty Advisor

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Biology Graduate Student Project

Located in southern Africa, Botswana is a country about 6/7 the size of Texas and has a population of around 1.77 million. Of this population, the World Health Organization's 2005 estimates concluded that nearly 350,000, or 38% of the adult population, are HIV positive. Furthermore, it is estimated that there are also 120,000 AIDS orphans living in Botswana. [1]

In a remote corner of Botswana are the Koanaka Hills where a small tribe of San Bushman live. Once a predominantly hunting and gathering society, the San have been forced into village life by the government due to the expansion of diamond mining, cattle ranching and the establishment of wildlife game parks - a process that Amnesty International has called a "cultural genocide." [2] This has resulted in endemic alcoholism and abject poverty. The children, many of them AIDS orphans, are suffering the most.

We in the Paleobiology Lab at Sam Houston State University, conduct research near Koanaka and have been moved by the plight of these children. In association with The Biological Sciences Graduate Student Organization, we have committed ourselves to trying to improve the lives of the kids from the Koanaka Hills We are placing donation boxes at most of the major building on campus at Sam Houston State University from October 26th to December 5th and are collecting the following items to send over to the Koanakas: Clothing, Small Toys, Picture Books, Coloring Books, Pens and Markers, Shoes, Sporting Goods (Especially Soccer Equipment!).

In addition to our campus collection drive we also plan to hold the first annual ***Climb For Koanaka***. This week long event will start January the 28th, during normal climbing hours (2-

8pm) down at the Climbing Center rock wall located in the HKC on campus. Students are encouraged to visit and test themselves against any of the seven runs available. A donation of $5 will be welcomed and all who donate will receive a free Koanaka Kids wristband and the normal climbing fee waived. This event will culminate on Saturday, February 2nd from 12-5 with a contest to see who is the King of the Rock Wall! Climbers of all skill levels are welcome.
Contact Information: LDB 1-136-294-3654
Tim Campbell: 1-936-294-3397
Dr. Lewis: 1-936-294-3397
Email: koanakakids@yahoo.com

[1]http://www.who.int [2]http://www.landrightsfund.org/

The Woods-Berry gift to the James D. Long Biology Endowment Fund

The Department of Biological Sciences was the recent recipient of a gift in the amount of $550,000 to support its student scholarship program for biology majors. The gift honors Dr. James D. (Jimmie) Long, former Director of the Biology Department and Professor Emeritus of Biology who retired in 1999. The funds were added to the James D. Long Biology Endowment Fund, already in existence. The gift was provided from the estates of Dr. Long's long time friends, Pauline Rea Woods and Merry Mary Berry, former Texas public school teachers. An equal amount was also given to the Sociology Department at SHSU in honor of Ms. Woods' father who initiated the sociology program at SHSU. What follows are recent personal recollections from Dr. Long about Ms. Woods and Ms. Berry and his long term friendship with these two generous ladies.

Ms. Woods and Ms. Berry met each other during World War II as volunteers in the USO club in Muskogee, Oklahoma, where Ms. Woods was recruited as club director. They then moved on to USO clubs in Junction City, Kansas, and Temple, Texas, forming what was to become a life long friendship. Ms. Berry, who grew up as the daughter of a surgeon in Oklahoma, was engaged to a serviceman who was later killed in action during the war. Both women remained single for the rest of their lives.

Pauline Woods (b. 1907 or 1908) was the niece and later adopted daughter of Mabel A. Prentice and Ramsey M. Woods, who was the first teacher of sociology at Sam Houston State University. She obtained her bachelor's degree from Sam Houston State Teachers College and her M. A. degree in physical education from Columbia University in New York City. Beginning in 1931 Ms. Woods taught physical education and, later, history and Spanish for 41 years in the Houston Independent School System. Her 1985 book, "Many Splendored Memories" is a lively account of growing up in Huntsville as the daughter of Professor and Mrs. R. M. Woods. (Copies of this book are available in the Newton Gresham Library at SHSU -confusion on her birth year are explained therein.) Following several years in an assisted living facility in Houston, Ms. Woods passed away in 2000 at the age of 92.

Ms. Berry (b. 1917) was trained as a science teacher in Oklahoma and later earned an MS in Biology at SHSU where she studied mosquito biology under Mr. Frank Cowan (Dr. Long, earlier, had also received his MA degree under Mr. Cowan). Ms. Berry taught high school

biology and other sciences, initially, in San Marcos, and then for many years in the Marlin school system. She was highly respected and revered by her students, many of whom spoke about their personal experiences in her classroom at Ms. Berry's funeral in Marlin in 2006. At the time of her death, Ms. Berry was 89 years old, having spent several years in a Houston nursing home.

Dr. Long met the Woods family as a first year graduate student at Sam Houston State Teachers College in Huntsville where he rented a room from Mrs. Woods in the Woods' home in the fall of 1951. Professor Woods had passed away in1940. At that time the Woods daughter, Pauline, who had been teaching in Houston for 20 years, came to Huntsville to visit her mother nearly every weekend, and was often joined by her friend Merry Berry from Marlin. Lacking siblings, nieces or nephews of their own, Pauline and Mary often referred to Jimmie as their "adopted brother" (Merry had one older sister with whom she rarely visited). As experienced teachers, Pauline and Merry gave encouragement to Jimmie as he was to finish his MA and move on to the University of Texas to complete the Ph.D. degree. On his trips between Austin and his home in Rusk, Texas, Jimmie would often stop to visit at the Woods home in Huntsville. In 1959, following completion of the Ph.D. and a university teaching stint in Illinois, Dr. Long began his 40 year career with the Biology Department at SHSU. Pauline and Mary continued to visit Huntsville, usually visiting one weekend per month and in later years staying with Jimmie at his lake side home on Spring Lake. The two ladies enjoyed summer travel and took extensive trips in the U. S. as well as overseas. Jimmie, an avid Anglophile, once met them in Scotland where he served as their personal tour guide on a memorable trip for all. Following their retirements from teaching, Pauline and Merry spent their final years in assisted living facilities and nursing homes in Houston where Dr. Long continued the friendship as their frequent guest. He ultimately arranged funerals for both Pauline and Merry.

Pauline and Merry were wise investors and frugal with their earnings from teaching. They were generous during their lifetime, donating funds to friends in need, to Habitat for Humanity and to the Methodists Children's Home in Waco. Dr. Long encouraged them to remember Sam Houston State University in their giving plans, and the generous gifts to the Biology and Sociology Departments are the result of this life long friendship. The university is indebted to Ms. Woods and Ms. Berry for their generosity and to Dr. Long for his many years of service to Sam Houston State University.

A. Dewees, October, 2007

Faculty News

Dr. Jerry Cook (2000)

This year I am on leave from my teaching assignment at SHSU and serving as the Program Director for Systematics and Biological Survey and Inventory at the National Science Foundation in Arlington, Virginia. I will return to my normal academic duties in January, 2008. However, during this time, I have maintained an active research lab at Sam Houston State University. I currently have three graduate students; Shirley Carrias, Jovanne Cole, and Efthymios Gkotsailias and have had three undergraduates working in the lab. I have continued my own research, receiving grants from the Texas National Guard and Whitmire Micro-Gen. and I was an author of five papers published in scientific, peer-reviewed journals in 2007. During this year I have served as President of the Big Thicket All Taxa Biological Inventory, Associate Editor for *The Southwestern Naturalist*, and Research Associate at the United States National Insect Collection at the Smithsonian Institution.

Dr. Tami Cook (2000)

Newsletter items of note:

- Appointed Associate Dean College of Arts & Sciences
- Publications in refereed journals(*indicates graduate student coauthor; § indicates undergraduate student coauthor)
    - Clopton, R. E., **T. J. Cook**, and J. L. Cook. 2008. *Trichurispora wellgundis* N. G., N. Sp. (Apicomplexa: Eugregarinida: Hirmocystidae) Parasitizing Adult Water Scavenger Beetles, *Tropisternus collaris* (Coleoptera: Hydrophilidae) in the Texas Big Thicket. Comparative Parasitology 75: *in press*.
    - §Realzola, E., J. L. Cook, **T. J. Cook**, and R. E. Clopton. 2007. Composition of Gyrinid Aggregations in the East Texas Primitive Big Thicket (Coleoptera: Gyrinidae). Coleopterist's Bulletin *in press*.
    - *Lowery, M. B. and **T. J. Cook.** 2007. Oviposition site preference of *Corydalus cornutus* (Megaloptera: Corydalidae) in east Texas. Southwestern Naturalist *in press*
    - Clopton, R. E., **T. J. Cook** and J. L. Cook. 2007. Revision of *Geneiorhynchus* Schneider, 1875 with Recognition of 4 New Species of *Geneiorhynchus* and Description of *Geneiorhynchus manifestus* N. Sp. Parasitizing Naiads of the Green Darner, *Anax junius* in the Texas Big Thicket. *Comparative Parasitology*, 74:273-285.
    - *Hays, J. J., R. E. Clopton, **T. J. Cook** and J. L. Cook. 2007. Revision of the Genus *Nubenocephalus* and Description of *Nubenocephalus secundus* N. Sp. (Apicomplexa: Actinocephalidae) Parasitizing Adults of *Argia sedula* (Odonata: Zygoptera: Coenagrionidae) in the Primitive Texas Big Thicket, U.S.A. *Comparative Parasitology* 74: 286-293.
    - *Smith, A. J. and T. J. Cook, and W. I. Lutterschmidt. 2007. Effects Of Temperature On The Development Of *Gregarina Cubensis*(Apicomplexa: Eugregarinida) Parasitizing *Blaberus Discoidalis* (Blattaria: Blaberidae). Journal of Parasitology 93: 583-588.
- Externally Funded Grants and Contracts
    - National Science Foundation. RUI: Collaborative Research: Microbiological Survey and Inventory of Gregarines Parasitizing Aquatic and Riparian Insects of the Texas Big Thicket. [with J.L. Cook and R.E. Clopton]. 2004 – 2007. $232,854
    - National Science Foundation. ROA SUPPLEMENT FOR: RUI: Collaborative Research: Microbiological Survey and Inventory of Gregarines Parasitizing Aquatic and Riparian Insects of the Texas Big Thicket. 2005 – 2007. $24, 172
- Student presentations at professional society meetings (* indicates graduate student; § indicates undergraduate student)
    - §Dahlgren, S., **T. J. Cook**, and R. E. Clopton. 2007. Patterns of eugregarine infection in damselflies (Odonata: Coenagrionidae) of the Texas Big Thicket. First North American Parasitology conference, Mérida, Mexico. [oral presentation]
    - *Hays, J. J., **T. J. Cook**, and R. E. Clopton. 2007. Patterns of eugregarine infections of *Argia* spp. (Odonata: Zygoptera) across biogeographical provinces in Texas. First North American Parasitology conference, Mérida, Mexico. [oral presentation]
    - §Garcia, J. C., **T. J. Cook**, and R. E. Clopton. 2007. Patterns of eugregarine diversity in damselflies in four east Texas ponds. First North American Parasitology conference, Mérida, Mexico. [oral presentation]
    - *Hays, J. J., **T. J. Cook**, and R. E. Clopton. 2007. Patterns of eugregarine infections of *Argia* spp. (Odonata: Zygoptera) across biogeographical provinces in

Texas. Southwestern Association of Parasitologists**,** University of Oklahoma Biological Field Station. [oral presentation]

- §Garcia, J. C., **T. J. Cook**, and R. E. Clopton. 2007. Patterns of eugregarine diversity in damselflies in four east Texas ponds. Southwestern Association of Parasitologists**,** University of Oklahoma Biological Field Station. [oral presentation]

♦ Honors, Awards, and Service

- Editor of *Comparative Parasitology*
- Invited Annual Honors Program Lecturer at McDaniel College, Westminster, MD
- Elected member of the American Society of Parasitologists Nominating Committee
- Appointed member of the American Society of Parasitologists Student Awards Committee (acting chair of committee at annual meeting in Mérida, Mexico)
- Member of NSF Undergraduate Research Mentoring grant review panel (May 07)
- Member of NSF Biological Research Collections grant review panel (Oct 07)
- Member, University Faculty Research Council

Dr. Patrick Lewis (2006)
News from the Paleo Lab

Simply put, it has been a busy, fruitful year in the Paleobiology Lab. Since my arrival at Sam about 12 months ago, some very dedicated students and I have literally built the lab from the ground up, while at the same time presenting and publishing research, obtaining grants, creating several new courses, and even getting out in the field. Here are a few of the year's highlights:

Three lab members, Alicia Kennedy (undergraduate), Tim Campbell (graduate), and I worked in the Free State of South Africa for a month on a 4 million year old fossil site. We had an amazing time, finding everything from one of the earliest true elephants in Africa to a variety of antelopes, carnivores, rodents, lizards, and birds. With the help of Dr. Monte Thies, we then visited northwestern Botswana for a couple of wild, adventure-filled weeks in order to initiate a new field project that will involve exploring a cave rich with microfaunal fossils of Plio-Pleistocene age. On the home front, Kelly Forson (undergraduate) spent six weeks out in west Texas working with colleagues from the Museum of Texas Tech on two different fossil localities. Alicia Kennedy performed double duty this summer, heading out for a month-long dig in west Texas days after returning from Africa.

As for what's in store for the '08 field season, we plan to spend at least 10 weeks in Africa split between South Africa and Botswana with at least twice as many Sam students participating. Others students from the lab will be heading back out to west Texas to expand our role in several joint excavations in that region.

We added four new graduate students to the lab this fall. University of Rhode Island graduate Tim Campbell is working with fossil material from Botswana and South Africa, exploring the use of GIS methodologies for modeling past environments. The other three are all familiar faces at SHSU, having done their undergraduate work here: Stephanie Morse is working on the diet of late Quaternary bison, Julie Sculley is describing a fossil bird fauna from west Texas, and Sophia Aguayo is working on the use of dental microwear as a tool for paleoenvironmental reconstruction. We are excited about this infusion of graduate students in the Paleo Lab, and are looking forward to their contributions in the coming year.

It is worth noting that virtually all the past year's accomplishments were made by undergraduates. Junior Alicia Kennedy alone presented six times, procured three research grants,

a travel grant, and participated in three summer field research projects, all while working as a TA. Her research is focused on the fossil reptiles from several southern African sites. Also presenting research were undergraduates James Cureton and Julie Sculley. James Cureton, a senior, presented research relating to his ongoing work on the preparation of fossil material from the Botswana site, and Julie Sculley, while still an undergraduate, presented work on fossil shrews from Africa.

All together this past year, members of the Paleo lab attended seven different conferences and delivered 12 presentations all with students on the author line. So far we are on pace to surpass that total in the coming year, including four presentations accepted for the prestigious Society of Vertebrate Paleontologists conference in Austin this October. In addition to the above mentioned graduate and undergraduate research projects, we have senior Kelly Forson who will be looking at the small mammal fauna from the South African site of Plovers Lake, and sophomore geology major Randy de la Garza who is working on a late Miocene marine fauna from North Carolina. For more information on all the students and their projects, visit: http://www.shsu.edu/~pjl001/students.html.

I added two new course offerings this year, Biological Anthropology and Paleobiology, which have both been well received. For the spring, I hope to give BIO 571, Evolution, a focus on the primate/human lineage. Many graduate and undergraduate independent research courses have also been accomplished in the Paleo Lab in the last year. Kristen Cossota, a CJ grad student, worked on the curation and analysis of SHSU's human skeletal collection. Brandy Nunez, a Biology grad student, worked on the South African mammal fauna from the Coopers site, and senior Pratima Rajput created an embryology lab book. Senior David Cordova is currently working on a guide to the teeth of modern African rodents, and junior Katherine Robberson if identifying and curating the modern primates in our museum's vertebrate collection. We have also sponsored six speakers for the Thursday seminar series since last September, including Dr. Chris Bell (UT) and Dr. Steven Churchill (Duke), who are scheduled to speak this semester.

Several articles were published out of the lab this year, including three that were submitted and accepted since my arrival. We hope to increase this number in the coming year and to get more Sam students on the author lines. The lab also appeared in the *Huntsville Item*, the Office of Research and Special Programs January newsletter, and Today@Sam. Scholarly articles published this past year are:

Patrick J. Lewis, Briggs Buchanan, Eileen Johnson, and Steven E. Churchill. 2007. The evolution of *Bison bison:* a view from the Southern Plains. *Bulletin of the Texas Archaeological Society,* 78:197-204.

Patrick J. Lewis and Elwyn L. Simons. 2007. Evolutionary trends in the rodent fauna from the Fayum of Egypt. *Palaeontologia Africana,* 42:37-42.

Juliet Brophy, Darryl J. de Ruiter, **Patrick J. Lewis**, Steven E. Churchill. 2007. Accumulating agents and paleoenvironment of the hominin-bearing site of Plovers Lake, South Africa. *Current Research in the Pleistocene,* 24:147-150.

Patrick J. Lewis, Eileen Johnson, Briggs Buchanan, and Leland Bement. 2007. Sexing *Bison antiquus* metapodials: a test of the PCA method. *Current Research in the Pleistocene,* 24:76-79.

Briggs Buchanan, Eileen Johnson, Richard Strauss, and **Patrick J. Lewis**. 2007. A morphometric approach to assessing late paleoindian projectile point variability on the Southern High Plains. *American Antiquity,* 52(203):52-72.

In short, the Paleo Lab had a great first year and we are anticipating even bigger things in the year to come. Please drop in and see what we're up to!

Picture of Tim Campbell, Juliet Brophy (Texas A&M grad student), Alicia Kennedy, myself, and Monte Thies in Bone Cave, Koanaka Hills, Botswana.

Dr. Diane Neudorf (1999)
Dr. Neudorf has been busy over the last year with her research program. There are currently three graduate students and several undergraduates working in her lab. Five scientific presentations have come out of the Neudorf lab over the last year. In collaboration with Dan Jones, Dr. Neudorf is continuing to work on a contract from Texas Parks and Wildlife to conduct winter surveys of the threatened Bachman's Sparrow at the Gus Engeling Wildlife Management Area in Anderson Co., TX. Drs. Neudorf and Lutterschmidt were awarded a renewal of their NSF REU program grant. The program supports eight undergraduate students to work with biology faculty each summer.

Research Experiences for Undergraduates (REU) in Experimental Field Biology at Sam Houston State University. (Neudorf and Lutterschmidt) See Photos below
Last summer was the first year of our four-year renewal for our NSF supported REU program. We had eight student participants who lived on campus for ten weeks over the summer. The students worked on independent research projects with biology faculty mentors as well as attending weekly seminars to learn about the research process. We also took the students on several field trips including the Houston Zoo, the Houston Museum of Natural Science, Moody Gardens, and Zilker Botanical Gardens in Austin. We had student participants from SHSU, the University of Houston Downtown, Baylor University, Clarion University of Pennsylvania, Cornell University, Bloomsburg University, Eckerd College, and

Bridgewater College. The program was a great success. The students left with positive feelings regarding careers in research and our university.

At the gulf of Mexico in Galveston

At the Houston Museum of Natural Science

REU Students at the Poster Session

……..

Dr. Todd Primm (2005)

Dr. Primm serves as Chair of the Texas Branch of the American society for Microbiology meeting, to be held here on Nov 15-17, 2007. This is the first time ever that this meeting will be at Sam. Many faculty and students will be helping to run the meeting, which will bring in over 100 microbiologists from all over the state.

Dr. Matthew Rowe (2005)

With the support of his faculty, the Dean, and the new Assistant Chair of the Department, Dr. Joan Hudson, Dr. Rowe finally squirreled some time away from being Chair to get back into his research. He published the following two papers last year, and has a third in press:

Bulluck, J.F. & M.P. Rowe. 2006. The use of southern Appalachian wetlands by breeding birds, with a focus on neotropical migrant species. *The Wilson Journal of Ornithology* 118:399-410.

Rowe, A.H. & M.P. Rowe. 2006. Risk assessment by grasshopper mice (*Onychomys* spp.) feeding on neurotoxic prey (*Centruroides* spp.). *Animal Behaviour* 71:725-734.

Clucas, B., M.P. Rowe, D.H. Owings & P.C. Arrowood. (In press). Snake scent application in ground squirrels (*Spermophilus* spp.): a novel from of antipredator behavior? *Animal Behaviour*.

Additionally, he and his co-author and wife, Dr. Ashlee Rowe of UT Austin, spent a month this summer continuing their joint research exploring the coevolution between bark scorpions and grasshopper mice. Ashlee and Matt and undergraduate Honors' student Eryn Pendley spent two weeks in the Organ Mountains of New Mexico, trapping mice and working on the basic ecology of scorpions. Ashlee and Matt spent the next fortnight in Nevada trying to catch more grasshopper mice which, because of the long-running drought in the Great Basin, proved elusive.

Dr. Everett Wilson (1962)
Dr. Wilson's summer Field Studies course to Belize has been a resounding success. He has taken students in 2005, 2006, and 2007 and has had rave reviews from the students after each trip. His course for May 18, 2008, is already full with 16 students signed up for the course BIO 380 Field Biology.
Dr. Wilson continues to encourage and support international students. Two students from Belize have been on Department Academic Scholarships, Sian Escobar and her sister Stacy Escobar. A new student from Belize, Samir Rosada, received one of the Wilson-Warner full ride scholarships ($5,100 each semester) beginning Fall 2007. All three students from Belize live with Dr. Wilson at his home in the country west of town on FM 1374. This fall Dr. Wilson recruited Sokun Seng from Cambodia who received a $1000 scholarship beginning Fall 2007. Dr. Wilson enjoys recruiting for Sam Houston on every trip he takes.

Retired Faculty from Department of Biological Sciences and Years Served (Current Location)

Dr. Ruth Thomas1964-91 (Huntsville)
Dr. Terrell Hoage 1968-97 (Huntsville)
Dr. Darrell Hall 1965-98 (Huntsville)
Dr. Jimmie Long 1959-99 (Huntsville)
Dr. Maynard Yoes 1961-1985 (Mimbres, NM)
Dr. Robert Stewart 1959-60, 1967-92 (Nacogdoches)
Dr. Ralph Moldenhauer 1968-98 (Dubois, WY)
Dr. Thomas Meade 1965-99 (Tucson, AZ)
Dr. John Hilliard 1968-95 (Huntsville)
Dr. Andrew Dewees 1967-2004 (Huntsville)

Current Faculty in Department of Biological Sciences

Matthew Rowe, Ph. D. (University of California, Davis). Professor and Chair. Behavioral Ecology mpr002@shsu.edu

Karölis R. Bagdonas, Ph.D. (Colorado State University), Associate Professor. Human Anatomy, Ecology and Entomology. bio_krb@shsu.edu

Jerry L. Cook, PhD. (Texas A&M University), Associate Professor. Entomology, Anatomy and Physiology. bio_jlc@shsu.edu

Tamara J. Cook, PhD. (Texas A&M University), Associate Professor. Entomology, Invertebrate Zoology, Parasitology and Ecology. bio_tjc@shsu.edu

James R. DeShaw, Ph.D. (Texas A&M University), Professor. Environmental Science. bio_jrd@shsu.edu

***Harold F. Foerster**, Ph.D. (University of Texas), Professor. Microbiology and Virology.

Anne Roush Gaillard, Ph.D. (Emory University), Assistant Professor. Cell Biology and Genetics. bio_arg@shsu.edu

Chad Hargrave, Ph.D. (University of Oklahoma), Assistant Professor. Aquatic Community Ecology and Ichthyology

Joan E. Hudson, Ph.D. (Iowa State University), Associate Professor. Plant Morphology and Plant Physiology. bio_jxn@shsu.edu

Patrick Lewis, Ph.D. (Duke University), Assistant Professor. Paleobiology. pjlewis@shsu.edu

James D. Long, Ph.D. (University of Texas), Professor Emeritus. Medical Entomology. bio_jdl@shsu.edu

William Lutterschimdt, Ph.D. (University of Oklahoma), Associate Professor. Comparative physiology, Physiological ecology, Herpetology. bio_wil@shsu.edu

Diane Neudorf, Ph.D. (York University), Associate Professor. Avian Biology and Animal Behavior. bio_dln@shsu.edu

Todd Primm, Ph. D. (Baylor College of Medicine). Assistant Professor. Bacterial Physiology. tpp001@shsu.edu

Christopher Randle, Ph.D. (Ohio State University). Assistant Professor. Plant Molecular Systematics and Evolution. randle@shsu.edu

Monte L. Thies, Ph.D. (Oklahoma State University), Professor. Ecological and Systematic Studies of Mammals. bio_mlt@shsu.edu

Jack C. Turner, Ph.D. (University of California-Riverside), Professor. Physiological Animal Ecology. bio_jct@shsu.edu

Justin K. Williams, Ph.D. (University of Texas at Austin), Assistant Professor. Plant Taxonomy and Systematics. bio_jkw@shsu.edu

***Everett D. Wilson**, Ph.D. (Purdue University), Professor. Mammalian Reproduction and Endocrinology. bio_edw@shsu.edu

* Retired, but teaching half time

Alumni News and Address Correction

Notice of The Biological Sciences Newsletter is mailed annually to former students of our Department. Be sure we have your correct address. Print this page and return alumni news items soon so that we can include them in the next newsletter. Or, simply email this information to Dr. Matthew Rowe mpr002@shsu.edu . **We want to hear from you!**

Name:_____
First M.I. Last (Maiden)

Degree: _____ Year:_____ Major:_____

Current Address: _____
_____
_____

Telephone Number(s): _____

Email Address: _____

Current Employment, news of your family and activities:

_____

_____

Please Return by US Mail To:
Dr. Matthew Rowe, Chair
Department of Biological Sciences

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