

## **News and Announcements from 2017**

### **NSF awards funding for research on ancient forest in New Mexico**

Dr. Gary Upchurch (Biology Department at Texas State) and Dr. Cynthia Looy (UC-Berkeley) recently received funding from NSF to continue research on a fossilized forest from the Late Cretaceous. The forest was very diverse with angiosperm plants that existed about 75 million years ago in the central part of present-day New Mexico. Of special note, the funded project also supports the research activities of two graduate students: Joan Parrott at Texas State and Dori Contreras (née Thompson) at UC-Berkeley. Dori is also one of our own having graduated in 2012 from Texas State with a B.S. degree in Biology. (Posted December 13, 2017)

### **Biology faculty participating in new STEM grant from NSF**

Dr. Dana Garcia and Dr. Kristy Daniel (both in Biology) have teamed up with Dr. Shetay Ashford (Department of Occupational, Workforce, and Leadership Studies) on a recently-awarded STEM grant from The National Science Foundation. The \$300,000 grant will allow the researchers to study and launch a pilot program that coordinates university, public school, and community resources in preparing under-represented students for success in pursuing STEM degrees in college. Dr. Ashford is the PI for the two-year project which officially started on December 1. (Posted December 8, 2017)

### **New faculty in Fall 2017**

This fall we welcome several new faculty to the Department. They are Dr. Sarah Fritts (Assistant Professor), Dr. Shobhit Sharma (Senior Instructor), Dr. Sunni Taylor (Senior Instructor), Dr. Hayley Gillespie (Instructor), Dr. David Johnson (Instructor), and Dr. Hugo Pedrozo (Instructor). (Posted October 4, 2017)

### **Ph.D. student wins award for outstanding dissertation**

Matt Milholland recently won the Outstanding Dissertation Award from the Graduate College. Matt's dissertation is titled Ecological Factors of Rodent Assemblage Structure Affecting Hantavirus Prevalence at Varying Spatial Scales and his adviser is Dr. Ivan Castro-Arellano. Matt's dissertation will also be entered into a national level competition. Congratulations to Matt for winning the award and being the latest Ph.D. graduate in the Biology Department. (Posted July 6, 2017)

### **Grad student wins award at scientific conference**

Timothy Cioffi (M.S. student in the Dharmasiri lab, left in photo) won third place for his research presentation on "IBR5 may regulate auxin responses in Arabidopsis through interaction with SCF Complex" in the graduate students' oral presentation competition at the 2017 American Society of Plant Biologists - Southern Section meeting recently held in Orlando, Florida. Congratulations to Timothy! (Posted June 1, 2017)

### **Fulbright Scholar arrives from Turkey**

Dr. Okan Külköylüoğlu from Abant İzzet Baysal University (Bolu, Turkey) recently arrived to begin his Fulbright Fellowship at Texas State University. Dr. Külköylüoğlu is a leading expert on the taxonomy and ecology of ostracods. These are very small aquatic crustaceans in the Class Ostracoda. They inhabit a variety of aquatic ecosystems, including marine and freshwater. There are about 65,000 – 70,000

described species including extant and fossil forms. However, there are likely thousands more undescribed species. Examining samples sent to him in the past few years, Dr. Külköylüoğlu has described seven new genera from Texas. In comparison, only 52 species had previously been described for Texas. Over the next year, Okan will continue examining local samples and will no doubt discover additional new species. Okan's host during his stay is Dr. Joe Veech whom he will be working with to learn new statistical techniques for analyzing species diversity. He will also be working closely with Dr. Benjamin Schwartz and other local scientists in his quest to discover and learn more about the diversity of this group of interesting organisms here in Texas. Okan's wife Hati is also a biologist and has accompanied him on his visit along with their two sons, Poyraz (age 10) and Uras (age 7). We welcome Okan and his family to the department and university. (Posted February 24, 2017)

### **Researchers awarded funding to study endangered lizard species**

Dr. Thom Hardy and Dr. Mike Forstner have been awarded a \$930,000 research contract from the Texas Comptroller's Office to conduct field surveys and develop a habitat model for the Dunes Sagebrush Lizard (*Sceloporus arenicolus*) in west Texas. The lizard is a candidate for endangered species listing with the United States Fish and Wildlife Service. It has primarily been threatened by habitat destruction and fragmentation. Thus there is a need to better identify the distribution of current and potential habitat and find ways of preserving that habitat. (Posted February 23, 2017)

### **Good showing by the Biology Department at recent wildlife conference**

Faculty, grad students, and undergrad students recently attended the annual conference of the Texas Chapter of The Wildlife Society in San Antonio. Several grad students presented their thesis research in oral presentations or posters. James Tolliver won an award for Best Poster Presentation ("Influences on black rail detection and implications for survey techniques"), selected among dozens of others. Other presenters included Michelle Adcock, Anne Beckman, Meagan Bell, Sarah Durham, Alyssa Fink, Anna Matthews, Silas Ott, Rebekah Rylander, and William Wunderlich. Among undergrad students, Howell Pugh was awarded Outstanding Student from a University Chapter. Also of note, the Quiz Bowl team consisting of undergrad students came in second place after a very close overtime finish. The Quiz Bowl is a competition in which student teams compete by correctly answering questions on ecology, wildlife management, statistics, and environmental law. Team members included Autumn Yarosz, Kristin Dyer, Jacquelyn Tleimat, Karen Alvarado, Hannah Salem, Alexa Brown, Robert Tyler, David Klingele, Sonia Duran, and Atessa Szeglin. Finally, Matt Wagner, a part-time faculty member in the department and retired employee of Texas Parks and Wildlife Department was presented with the Lifetime Membership Award. Congratulations to Matt and all the students that represented the department and university at this year's meeting. (Posted February 23, 2017)

### **Research on kangaroo rat featured on television program**

The weekly TV series produced by the Texas Parks and Wildlife Department recently featured research on the Texas kangaroo rat being conducted by Dr. Randy Simpson and graduate student Silas Ott. The 7-minute feature is currently airing on PBS stations throughout the state and can be viewed at <https://youtu.be/bgAcf5GmCPc>. The Texas kangaroo rat (*Dipodomys elator*) is a little-known species whose entire geographic range is confined to a few rural counties west of Wichita Falls in north Texas. Current research is examining the distribution, abundance, and habitat affinities of the species. Other

research team members include Dr. Joe Veech, Dr. Ivan Castro-Arellano, and graduate student Grady Terry. (Posted February 22, 2017)

### **Faculty member receives award for her exemplary contributions to graduate education**

Dr. Paula Williamson, Professor, has received the Award for Outstanding Contributions to Graduate Education from the Conference of Southern Graduate Schools. The award honors Dr. Williamson for her excellent contributions to graduate education worthy of recognition regionally and nationally, from among the 200 plus universities that belong to CSGS. Dr. Williamson first arrived at Texas State (then Southwest Texas State University) in 1988. Over the years, her research and that of her graduate students has mostly focused on the conservation biology of plants. Dr. Williamson's noteworthy involvement in graduate education includes appointment by the Ecological Society of America and United Negro College Fund to serve as Partner in the Strategies for Ecology Education, Development and Sustainability Program (SEEDS). Her accomplishments in that capacity included improving instruction in ecology courses and increasing the number of minority students majoring in ecology and entering graduate programs. She has also successfully promoted initiatives to increase the participation of graduate students in professional organizations and societies such as the Southwestern Association of Naturalists. Lastly, Dr. Williamson served as Associate Dean of the Graduate College at Texas State from 2005-2014 during which time she instituted many improvements to graduate education throughout the university. Congratulations to Dr. Williamson for the much deserved award! (Posted January 27, 2017)

### **Texas State – Aquatic Biology represented at a recent scientific conference**

Faculty, graduate, and undergraduate students from the department recently attended the meeting of the Texas Chapter of the American Fisheries Society in Corpus Christi, January 19 – 21. It appears that everyone had a fun time. Fourteen students were in attendance and all together seven of these students were involved in giving ten oral and poster presentations – an excellent showing. Of note, M.S. student Ashley Seagroves won Best Student Poster, Ph.D. student Cody Craig won a Student Scholarship Award and Dr. Tim Bonner won the Fisheries Worker Award for Research. Congratulations to Cody and Tim! (Posted January 27, 2017)

### **Major funding acquired to aid in the conservation of mussels**

The Texas Comptroller's Office has dedicated \$2.3 million in funds toward research on the distribution and abundance of five mussel species in basins of the Brazos, Colorado, and Guadalupe Rivers. The research will be directed by Dr. Tim Bonner, professor in the Department of Biology. In general, mussels are a highly imperiled group of species particularly in the Midwest and southeastern USA. However, much remains to be learned about the basic ecology and distribution of many species, including those in Texas. Beginning this year, Dr. Bonner and colleagues will start filling in the knowledge gaps. Their research is intended to help the United States Fish and Wildlife Service in their official assessment of the conservation status of the five species. In addition to field surveys and habitat assessments, the research will also aim to develop techniques for captive propagation. (Posted January 12, 2017)

### **Professor earns university recognition for career accomplishments**

Dr. Dittmar Hahn (Professor and Chair of Biology Department) was recently named a Texas State University System Regents' Professor by the Board of Regents. The recognition is based on an exceptional record as scholar, teacher, advisor, and leader. Dr. Hahn has been with the university since

2004. His main area of research is microbial ecology. Congratulations to Dr. Hahn! (Posted January 2, 2017)