The Biodiversity Research and Teaching Collections (BRTC), sponsored by Texas A&M Wildlife & Fisheries Sciences Department, teamed up with author and photographer Dave Lund to showcase a small sample of the greater than one million animal specimens contained within the BRTC collections.

This stunning display was hosted at the SEAD Gallery and Bookshop from September 19th through November 21st, 2019.

Vitality featured a blend of art and science through photographs and displays of ornithological specimens from around the globe. The BRTC is home to the only active ornithology collection in Texas and also includes mammals, fish, amphibians, reptiles, parasites, and invertebrates.

seadgallery.com/artists-collections/vitality-the-art-and-science-of-an-ornithology-collection
Winemiller Named Interim Department Head

I am happy to announce the appointment of Dr. Kirk Winemiller as interim head of the Department of Wildlife and Fisheries Sciences. His appointment began October 14.

Dr. Winemiller has developed a wide-ranging research program that has been recognized with multiple university, national and international awards. His research in Texas and across four continents has contributed to the development of food web theory, enhanced understanding of communities of freshwater and estuarine fishes, and improved the management and conservation of fisheries. He has co-authored 271 peer-reviewed publications which have been cited more than 20,000 times, with work appearing in top environmental science journals.

Dr. Winemiller has inspired many graduate students from around the world to enroll at Texas A&M University and has engaged dozens of undergraduates in research. To support research and student training, he has obtained nearly 9 million dollars in funding during his career at Texas A&M, including 18 grants from the National Science Foundation, two Fulbright Awards and significant grants from the Brazilian Government.

Dr. Winemiller’s honors include the Ecological Society of America’s prestigious Mercer Award, and he was elected a Fellow of the American Association for the Advancement of Science. He is also a Texas A&M University Distinguished Professor, Regents Professor and Senior Faculty Fellow at Texas AgriLife Research.

Please join me in welcoming Dr. Winemiller to the AgriLife leadership team.

Thank you,

Patrick J. Stover, Ph.D.
Vice Chancellor and Dean for Agriculture and Life Sciences
Texas A&M AgriLife Director
Texas A&M AgriLife Research
Did you know, there is a fungus that is devastating bat populations across a large portion of North America? White-nose syndrome is a disease caused by the fungus *Pseudogymnoascus destructans*, or Pd for short, that affects bats while they are hibernating. This can cause bats to become more active during hibernation and can cause them to use up their fat stores, which they use to survive over the winter. Melissa "Missy" Meierhofer, a Texas A&M University Wildlife and Fisheries Sciences Ph.D. candidate, studies how this disease might spread in Texas. She identifies locations and the specific conditions at those locations (e.g., temperature, humidity, etc.) of where bats occur in a large portion of the state.

Missy is a fourth year Ph.D. candidate from Ripon, Wisconsin and has always had an interest in animal behavior. She completed her undergraduate degree in Psychobiology at Ripon College, where she conducted a study on eastern bluebirds. She went on to complete her Master’s degree in Animal Behavior at Bucknell University where she first started studying white-nose syndrome in bats. Missy is currently in Finland as a Fulbright Scholar collaborating with researchers on a mathematical model to understand the potential spread of white-nose syndrome in bat populations across Texas in the future.
Undergraduate Student Spotlight

Beautiful Balmorhea State Park is an oasis in the desert of west Texas. In the pristine waters of the spring-fed pools live the endangered Comanche Springs Pupfish. Lauren Yancy spearheaded a study on their daily movement in the shallows, in four hour intervals, as a freshman Wildlife and Fisheries Sciences student. Additionally, she assisted with other research projects in Dr. Josh Perkin's lab, including Postdoc Dr. Matt Acre's project studying the accuracy of population estimation methods for the Comanche Springs Pupfish, as well as doctoral student Zach Steffensmeier's project on movement and population estimation of prairie chub in the Red River, using tag-recapture methods.

Lauren is originally from College Station, TX and is an outstanding sophomore Wildlife and Fisheries Sciences student. She is currently the President of the Texas A&M University (TAMU) Student Chapter of the American Fisheries Society and the Treasurer for the TAMU Student Chapter of the Wildlife Society. She was interested in marine life as a child and attended Sea Camp when in middle school. She was introduced to Wildlife and Fisheries Sciences as a career through a church youth counselor, who was a TAMU Wildlife and Fisheries Sciences student at the time. Conducting research was originally intimidating for Lauren, but now that she's gained some experience, she's interested in making it into a career. When talking with Dr. Josh Perkin about Lauren as an undergraduate researcher, he responded, "I wish I could have ten more just like her."

Blue-Green Algae

Dr. Todd Sink, Associate Department Head, Program Leader, and Associate Professor for Texas A&M University Wildlife and Fisheries Sciences Department, as well as one of the state's Aquaculture and Fisheries Extension Specialists for Texas A&M AgriLife Extension Service was interviewed this past summer on algal blooms for Central Texas News Now 25, ABC. During this past summer, five dogs died after swimming in Lady Bird Lake in Austin, TX. They suspect that harmful neurotoxins produced by a blue-green algal bloom (cyanobacteria) caused these dogs to die.

Dr. Sink explained that cyanobacteria are ubiquitous in water sources around the world, and they’re normally present in low concentrations that do not pose problems. However, the perfect combination of dry, hot conditions during the summer, especially with inflow of nutrients such as nitrogen and phosphorus from fertilizers, can be the perfect combination to produce an algal bloom. But, not all algae produce neurotoxins. However, blue-green algae specifically produce cyanotoxins that can pose a threat to livestock, dogs, humans, and fish. From the interview, Dr. Sink states that out of “1.3 million ponds in the state of Texas, and we only get six to eight cases of livestock induced deaths a year,” so the threat is not as drastic as it may seem. He cautions that a good rule of thumb for keeping your pets safe is that if you wouldn't drink the water, don't let your pets either.

facebook.com/erinheftkxxv/videos/589461798124602
aquaplant.tamu.edu/blue-green-algae
New 3 + 2 Wildlife Conservation and Policy Program

The Department of Wildlife & Fisheries Sciences at Texas A&M University and The TAMU Bush School of Government and Public Service have teamed up to offer a new five-year joint-degree program available to undergraduate students in Wildlife and Fisheries Sciences. Students who enter this program will complete the first three years as undergraduate Wildlife and Fisheries Sciences majors, and will then transition into the Master of Public Service and Administration program at the Bush School at the beginning of their fourth year. This allows students to complete both undergraduate and master degrees within a total of five years (3 + 2). Students are trained for jobs in conservation and policy, with a clear foundation in wildlife management. Students are prepared for a wide variety of post-graduate opportunities including employment in local, state, or federal government, non-profit organizations, and private industry.

The 3 + 2 program was developed by Dr. Perry Barboza as part of the Boone and Crockett (B&C) program at Texas A&M. The B&C program is named for Dr. "Red" Duke, the Boone & Crockett Club’s former president and Aggie, Class of 1950. It is generously supported by an endowment established with contributions from the Boone and Crockett Club as well as other Aggies and conservationists. The B&C program at A&M connects science to policy issues by preparing scientists to work with policymakers and also connects policy with science by preparing policy professionals to work with scientists on issues of conservation and management of wildlife. Visit the website at wfsctamu.edu/drredduke for more information on the 3 + 2 program and our activities in wildlife science and policy.
Digitized Parasites

Texas A&M AgriLife was featured in the Bryan-College Station Eagle on the collaborative efforts with over 25 institutions to digitize 1.3 million parasite specimens to facilitate future research and public access. Jessica Light, Associate Professor of Texas A&M University Wildlife and Fisheries Sciences and Curator of Mammals of the Biodiversity Research and Teaching Collections was interviewed for the article. This project is sponsored by a National Science Foundation Grant, totalling 3 years and $4.3 million in funding. The effort is meant to not only facilitate public access and collaboration between universities, but it also meant to facilitate studies on vector-borne disease transmission and establish a new standard for online documentation and sharing of information. Check out the original article in The Eagle in the link below:

cpaince.com/news/local/texas-a-m-agrilife-helping-digitize-parasite-specimens/article_45913766-e7f4-11e9-8421-a3c208ae7ce6.html?fbclid=IwAR26wKhs_qXlJ8K2goB3RjvijH9MrRgR5tpoh8imY6T92gRBlIE6c6UDuAQ

Awards

Dr. Jacquelyn Grace received the ADVANCE NCFDD Faculty Success Fellowship.

Texas Master Naturalist received the Conservation Education Award at the joint national meeting of The Wildlife Society and The American Fisheries Society for writing the Texas Master Naturalist Manual.

Dr. Todd Sink received the Texas A&M AgriLife Extension Superior Service Award.
Dr. Kevin Conway and Dr. Mariana Mateos recently published a paper identifying a new species of fish in northern Mexico which bears live young.

Poeciliopsis jackschultzi is a small minnow and is distinguished from other species by its coloration and skeletal features. The stained image on the bottom right is the ventral (underside) gill arches, in dorsal view (viewed from the top) of one female P. jackschultzi. View the full article and news release on the links below:

zooneks.pensoft.net/article/37586

A scanning electron microscope image of a Danionella dracula larva, a progenetic fish from S. Asia, which was featured as the October picture of the month for the TAMU Microscopy and Imaging Center. D. dracula is an emerging model in neuroscience and aging studies. Image courtesy of Dr. Kevin Conway.

microscopy.tamu.edu/picture-of-the-month/?fbclid=IwAR0vwS9_oT2f_IupFCF3clG6CkLx4CPHvV6iq5ui73OKFxShmzminkSvlU

Dr. Amy Baird of The University of Houston-Downtown collaborated with Texas A&M University's Dr. Jessica Light and Dr. John Bickham of Texas A&M Wildlife & Fisheries Sciences to identify a new bat species. Rhogeessa permutandis is a Nicaraguan species that resembles R. tumida, black-winged yellow bats found in Central America and Mexico. These researchers used museum specimen that date back to the 1960s and ‘70s for this discovery. Check out the original press release on the link below:

phys.org/news/2019-10--winged-species.html?fbclid=IwAR3N6QFNDyhYq8wtYsw6uU13iy9axMgkdKFPXjLD9KSI68SC5gOUJMRGoM

Other News

Dr. Delbert Gatlin and two of his Ph.D. students, Clement de Cruz and Kequan Chen, were featured in an article by feednavigator.com, an online global animal feed news source, for their recent publication in the journal, Aquaculture. They collaborated with researchers in Mexico and Hawaii to study the effects of using algal meals as a substitute for fishmeal and fish oil in carnivorous fish production. The link to the original article is below.

feednavigator.com/Article/2019/06/25/Algae-meals-may-provide-fishmeal-oil-replacements-for-fish-feeds
If you are interested in giving to the Department of Wildlife and Fisheries Sciences, please visit our website at wfsc.tamu.edu/giving-to-the-department

OR

For more information on giving opportunities or to inquire about naming opportunities, contact:
Collin Arledge | Texas A&M Foundation Director of Development | 979.847.9314

Newsletter Contact: Lindsay Hutchins | lhutchins@tamu.edu | 979.845.5704
Newsletter Created by: Kaylee Hollingsworth

Texas A&M Foundation

Giving to Wildlife and Fisheries Sciences

Dan Thompson received the Boone and Crockett Fellow Outstanding Achievement Award in Graduate Research.

Erin Buchholtz received the Association of Former Students Distinguished Graduate Student Award for Excellence in Research-Doctoral.

Fernando Yamamoto received the best oral presentation from the VIII International Symposium of Fish Nutrition and Health.

Melissa Meierhofer received the 2019 Vice Chancellor’s Award in Excellence for Graduate Student Research.