



College of

Agriculture and Natural Resources

TARLETON STATE UNIVERSITY™

Newsletter

A Message from the College Dean



Dr. Barry Lambert, *Interim Dean*

IMPORTANT DATES

- 10/2 [Texan Tour](#)
- 10/15 [Ag Center Tour](#)
- 10/18-23 [Homecoming](#)
- 10/23 [Alumni Breakfast](#)
- 10/26 [Special Kids Rodeo](#)
- 10/29 [Ag Center Tour](#)
- 11/4 [LDE Invitational](#)
- 11/6 [Texan Tour](#)
- 11/12 [Ag Center Tour](#)
- 11/25-26 [Thanksgiving Break](#)
- 11/30 [Last Class Day](#)
- 12/2-8 [Finals](#)
- 12/10 [Commencement](#)

Fall is in the air. At the university, fall brings many new things. New beginnings, new students, new opportunities and new challenges.

University enrollment is approximately 14,000 this fall with 2,303 of those being students enrolled in the College of Agriculture and Natural Resources.

Our annual FFA Officer Preparatory Academy has just wrapped up. Dr. Frazier and his team hosted over 31 national FFA officer candidates from across the United States. This is a wonderful opportunity to introduce some of the brightest young minds in the country to Tarleton, and I truly appreciate the amount of time that is required by so many faculty, staff and students to host the event.

Plans are underway for the first PhD degree in the College of Agriculture and Natural Resources. Faculty are working on a proposal to initiate a PhD in Animal and Range Sciences to begin in 2023. This is a big step for the college, but one that we are ready to take.

Increasing research opportunities for students continues to be a focus for the college. Faculty and students work on projects ranging from how to improve survivability of Bobwhite quail, to Mesquite control strategies, to novel approaches to reduce and understand stress response in horses, to studies on the economic competitiveness of small and medium sized cattle grazing operations in the Southern Great Plains. These studies not only provide real-world opportunities for our students, they provide new knowledge to serve our region and our Agriculture and Natural Resources stakeholders. Funding is key to conducting quality research and in the past year, our faculty submitted over 50 competitive grant proposals for over \$22M, with several of those already receiving notification of funding.

Homecoming is just around the corner. I hope that you will make plans to join us for the annual College of Agriculture and Natural Resources alumni breakfast on October 23. More information about this and other homecoming events can be found on page 8 of this newsletter.

We see a very bright and exciting future for the College of Agriculture and Natural Resources at Tarleton. Together, we can accomplish great things. We are continually seeking ways to connect and partner with alumni and friends. If you have an idea or question, or would just like to talk about how you can make an impact on the lives of our students and the future of the college, I welcome you to reach out to me at any time at blambert@tarleton.edu. I look forward to visiting with you.

Barry Lambert, PhD

TABLE OF CONTENTS

Welcome Message from the Dean	Agriculture Center Tours	Population Dynamics
National FFA Office Prep Academy	Have you heard of TexConnect?	American Dairy Science Board
NARRU Awards	PERS Summary for CONAR	Tarleton Wildlife Society
TREAT Special Kids Rodeo	SWRDC Receives Grant	WNR Summer Internship
Tarleton Agribusiness Club	Fall Gardens at the Horticulture Center	Stay Connected with COANR!
Tarleton Horticulture Club	SWRDC Research Showcase	On The Home Front
Ecology & Conservation of South Texas	Tarleton Attends Reciprocal Meat Conference	
Horticulture 2320 visits Wolfe Nursery Direct	COANR Alumni Homecoming Breakfast	



National FFA Officer Prep Academy at Tarleton

On September 23-26, 2021, Tarleton State University hosted 31 officers from across the country for the National FFA Officer Prep Academy to prepare for the rigors of the national officer selection program. Of these, 6 will be selected to fill an officer position. These officers will go on to be leaders in agriculture, research, business, education, and numerous other industries. Thank you to Stephenville’s InterBank, who donated \$5,000 towards the Tarleton FFA program for this event. According to Dr. David Frazier, the officer academy organizer, the donation will help offset transportation to and from Dallas-Fort Worth airport, meals for the weekend and housing expenses. Good luck officers!



Tarleton Faculty Sweep NARRU Awards

A pair of Tarleton professors swept the annual awards presented by Non-Land Grant Agricultural and Renewable Resources Universities (NARRU).

Dr. W. Brandon Smith (left) and Dr. David Frazier (right) were named winners of the Distinguished Educator Award and Distinguished Young Educator Award at the annual Non-Land Grant Agricultural and Renewable Resources Universities.

[Press Release](#)





TREAT Riding is beyond excited to announce that they are planning on hosting the biannual Special Kids Rodeo on Tuesday, October 26th. They have truly missed doing what they love! Though they are trying to keep this SKR "smaller", they will need all the help they can get! Consider using this opportunity to encourage your students to live out one of our core values here at Tarleton, service. A flier will be sent out as we get closer with more information.



Tarleton Agribusiness Club Kicks Off a New Semester

By: Cord Brown, Senior Agribusiness Student

The Tarleton Agribusiness Club will meet twice a month allowing students an opportunity to hear from people in ag related industries, and encourage students to get involved developing their future careers and internships.

The Tarleton Agribusiness Club has been around for more than 50 years and welcomes all majors graduate or undergraduate. Membership requirements are \$15 per semester, and to maintain a required GPA of 2.0 or higher.

Our advisors are Dr. Yu, Dr. Lovell, and Dr. Osei. Fun fact, Dr. Lovell was an instructor when the Agribusiness Club was established during his first tour of duty as a faculty member.

Photo right presents Agribusiness Club officers, from left to right. Risk Management: Vamshidhar Appareddy, President: Cord Brown, Secretary: Sadie Woolery, Treasurer: Cori Salinas, and Vice-President: Madelyne Stewart.



The Tarleton Horticulture Club is back!



Tarleton Horticulture welcomes back the restart of the TSU student Horticulture Club. The Horticulture Club has been reinstated by enthusiastic Tarleton undergraduate students that share a common love for plants and horticulture. Asst. Professor Dr. Weiss (serving as the faculty advisor) and Adjunct Horticultural Instructor Crissa Nugen facilitated the come-back and the club is off to an exciting start with student enrollment in the club already reaching 30 students. The primary Horticulture officers for this year are: President – Emelie Roussel, Vice President – Miranda Jennings, Treasurer – Katie Smith, and Social Media –

Neesa Johnson. The Horticulture Club hosted its first special event on September 22, 2021 that showcased Mr. Kirk Kirksey, a local beemaster apiculturalist, who presented a seminar on honeybees and the art of beekeeping. Approximately 45 TSU students attended the event.

Ecology & Conservation of South Texas

By: Dr. Darrel Murray, Assistant Professor Wildlife and Natural Resources

In mid-May, as an applied learning experience (ALE), students visited South Texas as part of the study-away Texas class *Ecology & Conservation of South Texas* offered by the Wildlife and Natural Resources Department. Twelve students and two faculty (Drs. Darrel Murray and Hemanta Kafley) travelled to South Padre Island and learned first-hand about South Texas conservation issues.

They visited the TPWD Coastal Conservation Association (CCA) Marine Development Center in Corpus Christi with CCA employee Patrick LaBarbera, WNR department alumni, who told students to “build your skills, diversify, and don’t be afraid to move around”. They also visited the USFWS Laguna Atascosa National Wildlife Refuge, Gladys Porter Zoo, Sea Turtle, Inc., UTRGV Coastal Studies Lab, Audubon’s Sabal Palm Grove Sanctuary, and the Texas-Mexico border wall to get a regional perspective.

One student commented “This study away was a great way for me and my fellow classmates to gain knowledge about the wildlife and conservation in South Texas and a great opportunity to get outside the classroom (Zoom) and gain some hands-on experience. During this trip, I learned a lot about the understanding of the ecology, species conservation, environmental issues, biodiversity conservation problems, and prospects of overall integrated regional conservation in South Texas.”

As a faculty fellow for experiential learning, I would like to remind everyone to consider opportunities for study away & study abroad for our students.



CCA Marine Development Center



UTRGV Coastal Studies Lab beach walk



Sea Turtle, Inc.



Laguna Madre Nature Trail



Texas-Mexico border wall

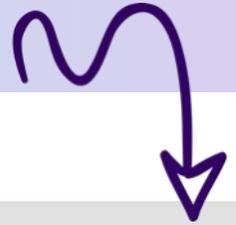
TSU Horticulture Classes Visit Wolfe Nursery Direct

Students enrolled in Asst. Professor Dr. Stuart Weiss’s Horticulture classes HORT 2320 (Sustainable Horticulture Practices and Greenhouse and Nursery Management) visited Wolfe Nursery Direct located in Stephenville, Texas on September 24, 2021. Wolfe Nursery Direct is a long-standing pillar in the Stephenville business community and a leading wholesale plant nursery in Texas. Mr. Bill Garr (General Manager), along with Jeanann Mullins (Production Manager), and Haley McNerney (Sales Manager) provided a warm welcome to the visiting Horticulture students and provided a generous and informative tour of the expansive nursery facilities. Students learned all about commercial landscape nursery operations and management. Thank you, Wolfe Nursery, for an amazing field day!





Students! Have you heard of TexConnect?! Click below to learn more.



TexConnect: A Resource Hub for Students

Texan Services	Food Resources	Transportation	Housing Resources
Academic Materials	Non-Academic Materials	Financial Well-being	Cultural Well-being
Emotional Well-being	Physical Well-being	DREAMers Resources	Parenting Resources
Give Online Now!	✉ Refer for Resource Outreach		

President's Excellence in Research Scholars Summary for the College of Agriculture and Natural Resources

During the Summer of 2021, The President's Excellence in Research Scholars (PERS) provided innovative learning experiences through research, technology, and other resources. Faculty within the college were awarded \$168,760 dollars. The goal was to engage students in research/creative activities to enhance their experiential learning experience under guidance of Tarleton Faculty/Research Staff. PERS provided students access to state-of-the-art educational opportunities, promote their development as researchers, stimulate interdisciplinary research collaborations, and generate new data for external funding

Project PI	Title
Dr. Mark Yu	Forecasting Volatility of Returns for Cotton Procedures in Texas
Dr. Edward Osei	Bridging the Digital Divide to Promote Economic Development in Rural Texas
Dr. Kim Guay	Effects of Cannabidiol (CBD) on Follicular Parameters in Cattle and Horses as a Model for Human Fertility
Dr. Lea Ann Kinman	Characterizing the Physical Properties of the Beef Rhomboid Muscle
Dr. Jolena Waddell	One Health Approach for Ovine Dysgnathia: Modern technology for Sheep Improvements
Dr. Darrel Murray & Dr. Adam Mitchell	Pollinator Response to Cultivars of Native Coneflowers for Prairie Restoration Pollinators, Native Plants, Habitat Restoration
Dr. Darrel Murray & David Johnston	Student and Leadership Development Using Applied Grassland Research: Maximizing Human Capital
Dr. Donald McGahan	Rhizobox Hydroponic Design to Foster Stable Growth for Identification, Type, and Speciation for Mycorrhiza Associated with Quercus Stellata Margaretta, Quercus Marilandia, Quercus Marcocarpa, and Quercus Stellata Margaretta
Dr. T. Wayne Schwertner & Dr. Heather Mathewson	Use of Environmental DNA to Quantify Aquatic and Terrestrial Vertebrate Biodiversity



Tarleton Dairy Center Receives Grant to Help Texas Producers

Tarleton State University's Southwest Regional Dairy Center has received an almost \$300,000 grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture. The grant will help initiate high-tech communications solutions to share research-based information gathered at Tarleton with producers and extension educators.

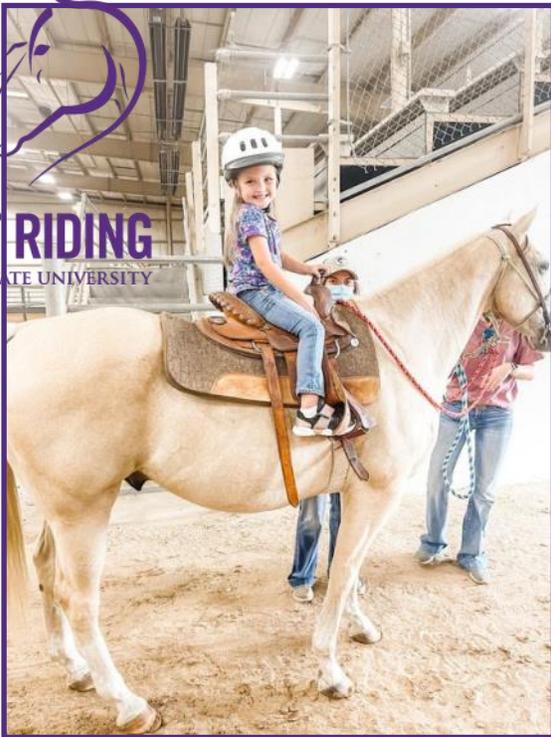
[Press Release](#)

Fall Gardens have Returned!

Tarleton Horticulture Students enrolled in Dr. Stuart Weiss's plant propagation (HORT 3300) course took advantage of the return of Fall and cooler weather to get outside and plant cool-season vegetable crops in the Tarleton Student Horticultural Gardens located at the Tarleton Agricultural Center. This garden represents unique opportunities for students to observe first-hand many of the different interconnected biological and ecological principles taught in class. Students intercropped swiss chard, asian greens, beets, broccoli, mustard greens, and winter squash alongside perennial buffer plants and biannual artichoke using conservation tillage practices.



TREAT RIDING
TARLETON STATE UNIVERSITY



TREAT Riding is back at it! We are happy to announce our "doors" are open and we are back serving those in our community with special needs.

Follow [TREAT on Facebook](#) for more information.



Southwest Regional
Dairy Center

**RESEARCH
SHOWCASE**

2 DOPA CREDITS OFFERED



Tuesday
November
30th

10:00 am to 2:00 pm | Lunch provided
2929 North US 281, Stephenville TX 76401



RSVP by Tuesday, November 16th bwjon.es@tarleton.edu | (254) 968-9971

Tarleton Attends Reciprocal Meat Conference

By: Dr. Lea Ann Kinman, Associate Professor Animal Science

Tarleton State University was well represented at the American Meat Science Association Reciprocal Meats Conference in Reno, NV this summer. Dr. Kinman, Dr. Cassens along with the meat science graduate students Jessica Johnson, Kendal Howard, Grace Franke and Amber Wight spent time networking with industry and academia professionals, attending scientific presentations, interacted with students from other universities, met with Tarleton alumni and were able to present their research during general poster sessions.



YOU'RE INVITED
**COANR ALUMNI
BREAKFAST**

Honoring Dr. Johnny Johnson

SATURDAY, OCTOBER 23, 2021

8:00AM- 9:30AM

TARLETON AGRICULTURE CENTER- EQUINE CENTER

Population Dynamics and Community Assemblage of Semi-aquatic Turtles

By: Doreen Mata, MS graduate student, Wildlife and Natural Resources

The objective of this project is to evaluate and identify the community of semi-aquatic turtles, assess populations of semi-aquatic turtles in north-central Texas (i.e. abundance, age-structure, survival), and evaluate movement and connectivity among isolated water sources. An additional objective is evaluating two methods for obtaining these population and community responses: traditional mark-recapture versus environmental DNA (eDNA). My research is conducted on Texas Parks & Wildlife Department's McGillivray and Leona McKie Muse Wildlife Management Area, in May, Texas. Understanding the movements of semi-aquatic turtles and their community dynamics will further help with management in areas where they are invasive species, as well as help conservation efforts of threatened or endangered turtle species. In areas where they are invasive, they can negatively impact the native turtle species, such as transmitting pathogens to other similar species, causing a decline in the native ecosystems that they inhabit.



*ANRS MS graduate student
Doreen Mata*

I began traditional trapping and mark-recapture efforts in April 2021, in selected ponds throughout the property, five days a week. I take body measurements of each turtle trapped along with marking the edge of the carapace with a unique notch and immediately release the animal on site. I took one-liter water samples and environmental variables, such as, pH, total dissolved solids, ammonia, nitrates, nitrites, and dissolved oxygen once a week to evaluate changes that can be possibly correlated to the turtle's movements. In June 2021, I initiated the pilot study using eDNA and radio telemetry. I will fit a subset of 27 turtles with radio transmitters (ATS Inc., Isanti, MI, USA), ensuring an even sex ratio and using transmitters that weigh $\leq 3\%$ of the weight of any individual. I attach the transmitters to the posterior marginal scutes of the carapace with and will search for marked turtles every 24–72 hours during the study. Water samples are taken to Texas A&M AgriLife laboratory for eDNA extraction. We then amplify the DNA and sequence for the target species to determine the presence or absence of our target species. We will compare results from eDNA to traditional methods of mark-recapture and radio telemetry, focusing on evaluating the effectiveness of the techniques.

Preliminary data indicates that our trapping methods might not be effectively capturing some of the rare turtles in the system. We primarily capture red-eared sliders but eDNA should help us identify those species that we miss from this traditional approach. As of the end of September we have radio-marked 10 red-eared sliders and have documented minimal movement of these individuals over the last month. This research will continue through 2022.

This research is supported by Texas Parks & Wildlife, 2021 Tarleton Faculty-Student Internal Grant, the 2021 Presidential Excellence in Research Scholarship Grant, and Dr. Heather Mathewson internal funds. Drs. Mathewson, Schwertner, and Kafley serve on the research committee.

Tarleton Assistant Professor Chosen to Lead ADSA Board

Tarleton State University's Dr. Barbara Jones has been named President of the American Dairy Science Association Southern Branch Board of Directors for 2021-2022. The American Dairy Science Association (ADSA) is an international organization of educators, scientists and industry representatives committed to advancing the dairy industry, keenly aware of the role the dairy sciences play in fulfilling world economic, nutritive and health requirements. ADSA members have discovered methods and technologies that revolutionized the dairy industry.

[Press Release](#)



The Start of a New Semester

By Katie Edwards, Tarleton Student Chapter of The Wildlife Society, President

The Tarleton Student Chapter of The Wildlife Society (TSCTWS) is off to a great start for the new fall semester of 2021. The student chapter held its first meeting on August 31st with over 60 students in attendance. During this time, students were introduced to the wide array of opportunities the student chapter has to offer, including field experiences, networking opportunities, as well as Quiz Bowl and Plant ID, the chapter's two competition teams. Afterwards, students had the chance to engage with fellow students and professors, sign up for upcoming field experiences such as assisting Cook Canyon Ranch with spotlight surveys, as well as the student chapter committees and competition teams.



Tarleton Student Chapter of The Wildlife Society 2021-2022 Officer Team: (top left to bottom right) Ryan Holcomb, Katie Edwards, Emily Vincik, Lark Holland Smith (with service dog, Bruce), Ty Cospers, Alex McBryde, Nancy Montealvo, and Emily McGhee.

At the last meeting, on September 14th, the student chapter had the privilege to welcome and listen to Dr. Stephanie Schuttler (aka The Fancy Scientist) as she spoke to members on how her childhood interests paved a path in the wildlife field and the best approaches, and tips, for getting a job in the wildlife biology or ecology field. The Tarleton Student Chapter of The Wildlife Society would like to thank Dr. Schuttler for taking time to speak with us.

Our next meeting is Tuesday October 12th at 6:00 pm and Dr. Sarah Fritts, Texas State University, will educate us on The Wildlife Society Certified Wildlife Biologist process. Check out our social media platforms to stay up to date on events and announcements. Also, subscribe to our YouTube channel for informative videos, Q&A's, and more. Feel free to contact President Katie Edwards (catherine.edwards@go.tarleton.edu) or Advisor Dr. Heather Mathewson (mathewson@tarleton.edu) for more information.

Summer Internship at Flying A Ranch

By Junior Rodriguez, undergraduate student in the Wildlife and Natural Resources department

This summer I completed my internship at the Flying A Ranch, located in Bandera, TX. The internship program started in 2001 where they would take up to 8 college students at a time for wildlife related purposes and the students would also serve as hunting guides from August to January. The internship opportunity was created by the ranch owner, Charles Williams, and the plans and direction were orchestrated by the ranch manager Keith Lake. They both see it as an important learning opportunity for students in the wildlife related degree field to gain experience in the field. The ranch has also been a site for graduate student research projects that included a study on migratory birds, a turkey survival project, and an axis-whitetail interaction study. The ranch itself is 9,000 acres with 4,000 acres dedicated to exotic species and the other remaining 5,000 acres dedicated to native species.

During the summer I had the opportunity to participate in a control burn, manage juniper growth and weedy species, work with feed for the animals, and some basic ranch and wildlife management practices. I got the chance to work with cattle, assisting in rotations and cattle sales. I also worked in trapping hogs and raccoons. I participated and aided in the helicopter capture, we would secure the stags and black buck, transporting them to the designated zone. After my time spent at this summer internship it shed light on the importance of an internship. The knowledge and the experiences I have gained, along with the connections I have established in the wildlife community were invaluable. If it was not for the department encouraging me to complete an internship I never would have understood the importance of one first hand.



Junior Rodriguez, Undergraduate Student in Wildlife and Natural Resources

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COLLEGE OF AGRICULTURE AND NATURAL RESOURCES



DEPARTMENT OF AGRICULTURAL EDUCATION AND COMMUNICATION
DEPARTMENT OF ANIMAL SCIENCE
DEPARTMENT OF WILDLIFE AND NATURAL RESOURCES

Welcome Baby

Charles Hayes Jones, aka Charlie, was born on April 27th to parents Barb and Scott Jones. Big Brother Walker has adjusted well.



In The Community

Dr. Brant Poe, AGSD Assistant Professor, speaking to Wilbarger County 4H members about Livestock Judging

