Updated January 2025

CURRICULUM VITAE
Chase Nunez, M.S., Ph.D.

PRESENT POSITION AND ADDRESS

Title	**Owner/Wildlife Biologist and Consultant**
Affiliation	Brush Country Wildlife Consulting LLC
Phone (Mobile)	(830) 609-8977
Email	hunt1094@gmail.com
Address	550 Deer Ridge, Seguin, Texas 78155

EDUCATION

Degree/Training	**Conferring Institution**	**Field**	**Year**
B.S.	Texas A&M University, College Station, TX	Biomedical Sciences	2017
M.S.	Texas A&M University, College Station, TX	Biomedical Sciences (Pharmacology)	2019
Ph.D.	Texas A&M University, College Station, TX	Biomedical Sciences (Vet. Pathobiology)	2023

PROFESSIONAL FIELD EXPERIENCE AND RESEARCH

2010–2021: Seasonal Employment: Rhino Outdoor Adventures, Leakey, Texas
- Hunting and nature guide on over a dozen properties spanning tens of thousands of acres for native and exotic wildlife

2013–2017 Research: Avian Bornavirus Surveillance with Dr. Ian Tizard (VTPB/Schubot Bird Center, Texas A&M University)
- Field collection of waterfowl brain samples that led to the discovery of a new Mallard strain of Bornavirus

2015 Study Abroad: Costa Rica Biomedical Science Semester Abroad
- Studying "One Health" and medicine as it applies to the tropical ecology and ecosystem management in Costa Rica

2016 Research: Kinetic Skeleton Model with Dr. Michelle Pine (VTPP, Texas A&M University)
- Construct clay canine pelvic limb models for 3D scanning/printing of teaching tools for veterinary anatomy classes

2017–2023 Employment: Cook Wildlife Lab, VTPB, Texas A&M University, College Station, Texas
- Graduate research assistant and wildlife veterinary technician for Dr. Walter Cook
- Aid in organizing and conducting chemical and physical capture of dozens of species of native and exotic wildlife
- Act as a Cook Lab representative from Texas A&M University at conventions, meetings, and private sector affairs
- Teaching assistant for undergraduate, graduate, and veterinary student classes (Wildlife Diseases; Wildlife Capture & Chemical Immobilization; Zoo and Exotic Wildlife Medicine; Native Game Identification)

2017–2018 Research: Brucellosis in Feral Swine with Dr. Walter Cook (VTPB/WFSC, Texas A&M University) and Dr. Brant Schumaker (University of Wyoming)
- Collection and necropsy of over 200 feral hogs for surveillance of *Brucella suis* in the Trinity River Basin of Texas

2017-2019 Research: Drug Treatments in Deer with Dr. Walter Cook (VTPB/WFSC, Texas A&M University), Dr. Virginia Fajt (VTPP, Texas A&M University), and Dr. Alice Blue-McLendon (VTPP/Winnie Carter Wildlife Center, Texas A&M University)
- Studying the serum pharmacokinetics of dart-delivered tulathromycin (Draxxin) in white-tailed deer
- Observe the effects of flunixin meglumine (Banamine) for treating capture-related hyperthemia in white-tailed deer

2017–2023 Research: Chemical Immobilization of Cervids, Bovids, and Equids with Dr. Walter Cook (VTPB/WFSC, Texas A&M University)
- Conduct field safety and efficacy trials with a three-drug capture combination, NalMed-A (Nalbuphine, Medetomidine, and Azaperone) and the respective reversals (Atipamezole and Naltrexone) for chemically immobilization of five cervid species, nine bovid species, and three equid species
- Compare the safety and efficacy of NalMed-A in equids to two other commonly used equine capture drug combinations, BAM (Butorphanol, Azaperone, and Medetomidine) and BAM + Ketamine

2018 Research: Pronghorn Haemonchosis Survey with Dr. Walter Cook (VTPB/WFSC, Texas A&M University)
- Collection and necropsy of Wyoming pronghorn antelope for surveillance of *Haemonchus spp.* parasites or eggs

2019 Research: Coyote Capture and Radio-collaring with Dr. John Tomecek (WFSC, Texas A&M University) and Dr. Walter Cook (VTPB, Texas A&M University)

- Working the ground crew while net-gun capturing coyotes in South Texas for tissue sampling and fitting with radio-transmitter collars

2019 Study Abroad: African Wildlife Medicine

- Learn alternative drugs and practices for African wildlife capture, treatment, and management

2020–2022 Research: Aoudad and Bighorn Sheep Disease Interactions with Dr. Walter Cook (VTPB/WFSC, Texas A&M University), Dr. Raquel Rech (VPAT, Texas A&M University), and Dr. Bob Dittmar (Texas Parks and Wildlife Department)

- Capture and infect exotic aoudad with respiratory pathogens from native bighorn sheep to determine host competency
- Capture, inoculate, and manage captive aoudad and bighorns to determine disease transmission dynamics
- Necropsy all aoudad and bighorn sheep to further describe disease pathogenesis in both species

2020–2023 Research: Anthrax in Texas with Dr. Walter Cook (VTPB/WFSC, Texas A&M University), Dr. Jim Derr (VTPB/GENE, Texas A&M University), Dr. Tammi Johnson (Texas A&M AgriLife), Dr. Tom Ficht (VTPB, Texas A&M University), Dr. Sankar Chaki (GHRC, Texas A&M University), and Warren Bluntzer (Wildlife Pharmeceuticals)

- Continued labratory development of a novel oral anthrax vaccine for use in wildlife
- Capture, vaccination, and serum collection from white-tailed deer and axis deer with various vaccine routes and doses to measure the immunogenicity of anthrax-specific IgG serum antibodies
- Serosurveillance for anthrax-specific antibodies of hunter-harvested white-tailed deer and feral hogs for risk mapping
- Complete a doctoral dissertation on the work conducted

2021 Research: Serum Antibody Integrity in Stored Serum with Dr. Mike Cherry (Albert and Margaret Alkek Ungulate Research Facility, Texas A&M Kingsville) and Dr. Clay Hilton (Albert and Margaret Alkek Ungulate Research Facility, Texas A&M Kingsville)

- Conduct diagnostic assays on vaccinated white-tailed deer serum samples exposed to differing storage to compare subsequent antibody detectibility

2021–2022 Research: COVID-19 in Deer with Dr. Sarah Hamer (VIBS, Texas A&M University)

- Conduct sampling of various captive cervid facilities to survey for SARS CoV-2 (COVID-19)

2022 Research: Rio Grande Virus in Sandflies with Dr. Myrna Miller (University of Wyoming), Dr. Will Reeves (USDA-APHIS), and Dr. Walter Cook (VTPB/WFSC, Texas A&M University)

- Submit deer blood samples for diagnostics and trap sandflies for surveillance for a non-pathogenic Rio Grande Virus

2022 Research: Bison Genetic Sampling with Dr. Jim Derr (VTPB/GENE, Texas A&M University)

- Biopsy darting North Dakota plains bison for genetic sampling and necropsy of an adult albino plains bison

2022-Present Employment: Warren Bluntzer Wildlife Consulting Services, Inc., Lampasas, Texas

- Wildlife biologist aiding in wildlife disease epidemiology, urban wildlife issue mitigation, habitat management, ranch and rural business undertakings, land/mineral disputes, and wildlife capture specialist.
- Apprentice for future acquisition of the company and clientele.

2023 Licensing: DEA Research Number RN0652215 (Currently inactive)

- Purchase and research drugs from schedules 2, 3, 4, 4N, and 5

2023-Present Employment: Brush Country Wildlife Consulting LLC, Caldwell, Texas

- Owner/Wildlife Biologist and Land Consultant

2024 Employment: Wedgewood Pharmacy, Swedesboro, New Jersey

- Consultant as a field wildlife biologist and wildlife capture specialist
- Aid in the field research and development of new drug products for chemical immobilization of wildlife

2024-Present Adjunct Faculty: Department of Veterinary Pathobiology, Texas A&M University, College Station, Texas

- Provide guest lectures and seminars to TAMU Vet School and classes for undergraduate, graduate, veterinary, and continuing education.
- Aid in grant writing and field research collaborations, particularly in regards to anthrax wildlife vaccination, disease surveillance, chemical immobilization drugs and techniques, and innovative disease management practices

2025-Present Faculty (Lecturer): Department of Biology, Texas State University, San Marcos, Texas

- Instructor for the lecture and lab component of an undergraduate and graduate course- Techniques in Wildlife Management (BIOL 4435/535)

TEACHING EXPERIENCE

2016 Teaching Assistant/Lab Technician: VIBS 305- Biomedical Anatomy (Dr. Michelle Pine)

- Aid in the example dissections for the teaching anatomy lab for undergraduate students
- Construct 3D models of canine limbs for teaching tools

2016 Guest Lecture: Pharmacokinetics of Remote-Dart Delivered Draxxin to Deer, Texas Deer Association

2017-2018 Teaching Assistant: WFSC 327- Wildlife Diseases (Dr. Walt Cook)
- Attend classes and give lectures when Dr. Cook was out in the field
- Aid in writing of exam and quiz questions
- Help with grading and input of grades into the online gradebook

2019 Guest Lecture: Anthrax in Texas Wildlife, WFSC 327- Wildlife Diseases, Texas A&M University

2019-2020 Teaching Assistant/Lab Technician: VCSC 948- Zoo and Exotic Wildlife Medicine Techniques (Dr. Jill Heatley, Dr. Alice Blue-McLendon, Dr. Walt Cook)
- Help set up for wet labs and aid vet students with lab techniques
- Aid in writing quiz questions
- Help teach the lab on hoof-stock chemical immobilization and darting techniques

2019-2023 Teaching Assistant: VTPB 988- Wildlife Capture, Chemical Immobilization, and Handling (Dr. Walt Cook)
- Help set up field labs and teach field capture techniques and handling protocols for various wildlife species
- Give at least one guest lecture per semester teaching

2020 Guest Lecture: Anthrax in Native Game, VTPB 948- Native Wild Game Management and Medicine, Texas A&M University College of Veterinary Medicine

2021 Guest Lecture: Anthrax in Texas Wildlife, Ceasar Kleburg Foundation Seminar, TAMU Kingsville

2021 Guest Lecture: Combatting Anthrax in Texas, Exotic Wildlife Association

2021 Guest Lecture: Trophy Scoring Texas Wildlife, VTPB 948- Native Wild Game Management and Medicine, Texas A&M University College of Veterinary Medicine

2023 Guest Lecture: Combatting Anthrax in Texas Wildlife, WFSC 327- Wildlife Diseases, Texas A&M University

2024 Guest Lecture: Combatting Anthrax in Texas Wildlife, RWFS 309- Wildlife Diseases, Texas A&M University

2024 Guest Lecture: Wildlife Diseases in Texas, Mumme's Inc. Customer Appreciation Banquet, Hondo, Texas

2025-Present Faculty Lecturer: BIOL 4435/5435- Techniques in Wildlife Management, Texas State University
- Teach undergraduate and graduate level students about various tools, techniques, and practices commonly used by wildlife professionals to handle, manage, and manipulate wildlife for the purpose of conservation, sustainable use, and scientific research.
- Design the structure of both a lecture and lab section of the course so that students have the opportunity to apply the tools, techniques, and practices they've learned in field situations

UNRELATED WORK/VOLUNTEER EXPERIENCE

2014-2017	**Employment:** Department of Chemistry Metal Shop, Texas A&M University	*Student Worker*
2015–2016	**Employment:** Rose Ranch Cattle Company	*Ranch Hand*
2015–Present	**Volunteer:** San Antonio Livestock Show and Rodeo- Junior Ag Mechanics	*Volunteer Judge*
2016–2019	**Employment:** B&C Fencing and Fabrication	*Owning Partner*
2017–2019	**Volunteer:** Brenham ISD Deer Day	*Volunteer Educator*
2017–2022	**Employment:** Aerify A/C Contractors	*Owning Partner*
2018-Present	**Volunteer:** Comal County Junior Ag Mechanics Show	*Volunteer Judge*
2022	**Volunteer:** *Texas Youth Hunt Program (Dittmar-Dittmar-Haschke Ranch)*	*Volunteer Guide*

BIBLIOGRAPHY

Nunez CM, Vickers ML, Thomas LF, Trotter KE, Cook WE. 2019. Successful Treatment of Severe Hyperthermia in Captive White-Tailed Deer (*Odocoileus virginianus*). *Poultry, Fisheries, and Wildlife Sciences* 8:210.

Nunez CM. 2019. The Use of Drugs in Captive White-Tailed Deer (*Odocoileus virginianus*): An Evaluation of Two Common Extra-Label Drug Uses in the Deer Breeding Industry. Master's Thesis, Texas A&M University.

Thomas LF, Nunez CM, Dittmar RO, Rech RR, Richison JJ, Lance WR, Cook WE. 2022. Safety and Efficacy of Nalbuphine, Medetomidine, and Azaperone for Immobilizing Aoudad (*Ammotragus lervia*). *Journal of Wildlife Diseases* 58:636-640.

Nunez CM, Thomas LF, Benn JS, Richison III JJ, Derr JN, Cook WE. 2022. Unsuccessful chemical immobilization of a roan antelope (*Hippotragus equinus*) using a premixed medetomidine-ketamine combination. *Journal of Wildlife Diseases* 58:935-938.

Roundy CM, Nunez CM, Thomas LF, Auckland LD, Tang W, Richison III JJ, Green BR, Hilton CD, Cherry MJ, Pauvolid-Corrêa A, Hamer GL. 2022. High seroprevalence of SARS-CoV-2 in white-tailed deer (*Odocoileus virginianus*) at one of three captive cervid facilities in Texas. *Microbiology Spectrum*, 10:e00576-22.

Hamer SA, Nunez CM, Roundy CM, Tang W, Thomas LF, Richison III JJ, Benn JS, Auckland LD, Hensley T, Cook WE, Pauvolid-Corrêa A. 2022. Persistence of SARS-CoV-2 neutralizing antibodies longer than 13 months in naturally infected, captive white-tailed deer (*Odocoileus virginianus*), Texas. *Emerging Microbes & Infections* 11:2112-2115.

Nunez CM. 2023. Combatting Anthrax (*Bacillus anthracis*) in Texas Wildlife with Continued Development of an Oral Anthrax Vaccine and Serosurveillance of Sentinel Species. *PhD Dissertation, Texas A&M University*.

Nunez CM & Benn JS, Blue-McLendon A, Chaki SP, Ficht TA, Rice-Ficht AC, Cook WE. 2024. In vitro protection and titer duration of anthrax-specific antibodies following subcutaneous vaccination of white-tailed deer (*Odocoileus virginianus*) with Bacillus anthracis Sterne 34F2 strain spores. *Journal of Wildlife Diseases* 60:179-183.

Benn JS & Nunez CM Blue-McLendon A, Chaki SP, Ficht TA, Rice-Ficht AC, Cook WE. 2024. Lethal toxin neutralizing antibody response induced following oral vaccination with a microencapsulated *Bacillus anthracis* Sterne strain 34f2 vaccine proof-of-concept study in white-tailed deer (*Odocoileus Virginianus*). *Journal of Zoo and Wildlife Medicine* 55:212-218.

Thomas LF, Clontz D, Nunez CM, Dittmar RO, Hernandez F, Rech RR, Cook WE. 2024. Evaluating the transmission dynamics and susceptibility of aoudad (*Ammotragus lervia*) experimentally infected with Mycoplasma ovipneumoniae and leukotoxigenic Pasteurellaceae. *PLOS One* 19:e0294853.

Nunez CM, Thomas LF. 2024. Book Review: Handbook of Wildlife Chemical Immobilization; 6th ed. by Kreeger TJ, Arnemo JM, Caulkett NA, Hampton JO, Meyer LCR. *Journal of Wildlife Management. In Press.*