

## CURRICULUM VITAE

# PEDRO MAZIER CHAVARRIA

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Commerce, TX 75428

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### **Education**

- Ph.D. Texas A&M University, College Station, TX; Wildlife and Fisheries Science. May 2013
- M.S. Texas A&M University, College Station, TX; Wildlife and Fisheries Science. August 2006
- B.A. Pomona College, Claremont, CA; Biology. May 1999

### **Research Interests:**

community ecology, terrestrial vertebrates, GIS, natural resource management, threatened and endangered species, exotic and invasive species, stream ecology, fire ecology, environmental science, STEM education, HSI Outreach

### **Work Experience**

**Texas A&M University-Commerce**  
Commerce, TX

Date Employed: 10/2022-current  
Hours: 40+ hrs/ week

#### **Assistant Professor (Wildlife)**

Tenure-track position in the College of Agricultural Sciences and Natural Resources (CASNR). Teaching courses with focus on wildlife ecology and natural resources management. Responsibilities include committee participation, research, grant writing, student advising and mentoring.

Principal thesis advisor to 1 M.S. student (Julia Zhu) and committee member to 4 non-thesis students.

Faculty advisor to the TAMUC Chapter of The Wildlife Society (Spring 2023)

Faculty advisor to 2 McNair Scholars Undergraduate Researchers (Vanessa Luviano, Keana Tatum)

Faculty advisor to 2 Honors College Undergraduate Theses (Vanessa Luviano and Mykah Gallaher)

Co-PI on USDA grant with Dr. Bob Williams: North Texas Alliance for Urban Agricultural Education

NLGCA-USDA-NIFA Award # 2023-70001-40987

#### **Courses taught:**

AG 316 / BSC 316 Becoming a Wildlife Professional (Online; Lecture)

AG 385 / 397 International Wildlife Conservation

AG 381 / 397 Big Game Management

AG 383 / 397 Waterfowl Management

AG 335 Wildlife Management I (Online; Lecture )

AG 336 Wildlife Management II (Online; Lecture)

AG 337 Wildlife Field Methods

AG 337 Wildlife Field Methods Laboratory

AG 405 Agri-Industries Internship

AG 423 Natural Resources Management

AG 435 Wildlife Habitat Ecology and Management

AG 440 Human Dimensions of Wildlife Management

AG 418 / 497 Undergraduate Research Experience

AG 491 Honors Independent Honors Readings

AG 518 Graduate Thesis

Committess served:

Honors College Associate Dean Search Committee (Spring 2025)  
 CASNR Dean Search Committee (Fall 2024)  
 Faculty-Led Student Initiatives Committee (Spring 2024-current)  
 Donor Funded Scholarship Review Committee (Spring 2025)  
 Masters Non-thesis Committee (Spring 2023-current)  
 Masters Thesis Committee (Fall 2024)  
 IACUC Committee (Spring 2025)  
 Campus Climate Committee (Fall 2024-current)  
 Latino Staff and Faculty Association (Fall 2024)

**Arizona State University-Polytechnic**  
 Mesa, AZ

Date Employed: 7/2019 – 5/2022  
 Hours: 40+ hrs/ week

**Wildlife Ecology Lecturer**

Lecturer and lab instructor for courses in the College of Integrated Sciences and Arts (CISA), including those in Biology and Applied Biological Sciences majors. Responsible for managing assigned courses and labs, student advising and mentoring, community outreach and recruitment, and collaboration on STEM grants. **Service:** Diversity, Equity, and Inclusion Committee, Awards Committee

Served as principal advisor to 2 Master's students (4+1 accelerated Applied Biological Sciences Masters program) for their Applied Projects, 1 Barret Honor's Thesis student, and mentor to (5+) Barrett Honors students

1. Matthew Karam: Evaluating Urban Avian Ecology And Hazards At Phoenix-Mesa Gateway Airport (completed Fall 2021)
2. Gabriella Mada: Monitoring Factors Leading to Successful Introduction of Burrowing Owls (*Athene cunicularia*) at ASU Polytechnic Campus (completion by Spring 2022)
3. Jennifer Kobs, Seasonal Variation in Burrowing Owl (*Athene cunicularia*) behavior and diets at ASU Polytechnic (completion by Fall 2022)

Courses taught:

BIO 182 Introduction to Biology II (Lecture)  
 BIO 182 Introduction to Biology II (Laboratory)  
 ABS 274 Introduction to Wildlife Management (Laboratory)  
 ABS 355 Vertebrate Adaptations  
 ABS 377 International Wildlife Conservation  
 ABS 470 Life History of Mammals  
 ABS 484 Internship  
 ABS 475 Habitat Management for Small Animals  
 ABS 490 Applied Biological Sciences Seminar  
 ABS 550 Vegetation Dynamics  
 ABS 592 Research  
 ABS 593 Applied Project

**Heritage University**  
Toppenish, WA

Date Employed: 1/2018 – 6/2019  
Hours: 40+ hrs/ week

**McNair Program Coordinator / Assistant Professor (Environmental Science / Biology)**

Program Coordinator for Ronald E. McNair Post-Baccalaureate Achievement Program (U.S. Department of Education TRiO programs). Lecture and lab instructor for McNair Research Methods course and other assigned Environmental Science and Biology courses. Advising and mentoring, community outreach and recruitment, and collaboration on STEM grants. Manage NEEF grant in collaboration with USFWS.

Served as external committee advisor to 2 Master's students from Universidad de Sonora.

Courses taught:

BIOL 410D Vertebrate Zoology (Lecture and Lab)  
ESNC 305L Ecology Laboratory  
BIOL 110L General Biology Laboratory  
ENSC 390 Special Topic: Wildlife Ecology and Techniques (lecture and lab)  
HON 303.0 GRE Preparation  
HON 303.1 Research Methods (Quantitative and Qualitative)

Master's Thesis, (External Committee) Advisor (2016-2019):

Student: Oscar Enrique López Bujanda  
Degree: Maestria en Biociencias  
College: Universidad de Sonora, Departamento de Investigaciones Científicas y Tecnológicas  
Project: Dieta invernal de la codorniz mexicana Moctezuma (*Cyrtonyx montezumae*) en Arizona y Nuevo Mexico

STEM Activities managed or participating on-campus:

1. Program Coordinator for Ronald E. McNair Postbaccalaureate TriO Program: Assist with finding summer research internship opportunities for 25+ students. Mentor the McNair scholars on their academic progress and planning for graduate school.
2. Grant writing: NSF Building Capacity CREST grant; NEEF HOL grant; Spark Bird grant
3. Faculty mentor for NSF i-Nature Indigenous (iNtegration of Aquatic sciences and Traditional-Ecological-Knowledge for Undergraduate culturally Responsive Education); Summer 2018 Faculty presenter for on-campus middle school and high school outreach events hosted by Heritage University's Admission Events Coordinator
4. People of the Big River Field Course: July 8-22 (2017, 2018) Field Course Instructor / Assistant: Assist Dr. Jessica Black with field lessons in GPS, Field Ecology, Wildlife / Mammology, Traditional Ecological Knowledge of Northwest tribes.
5. Indigenous Ecology Research in Panama: Assist Dr. Jessica Black with building capacity for ecological research with indigenous Ngobe-Bugle tribe in Panama (Central America); assist in Spanish translation and coordination of MOU with Universidad de Panama.
6. Costa Rica Indigenous Research Experience (LSAMP-CRIRE) Faculty mentor. Plan and guide native students from U.S. tribes with ecological research projects in Costa Rica.

**New Mexico State University**  
Las Cruces, NM

Date Employed: 5/2017 – 1/2018  
Hours: 40+ hrs/ week

**Adjunct Assistant Professor (Wildlife Ecology)**  
**USDA NRCT Faculty Mentor**

Adjunct / Term Professor in the Department of Fish, Wildlife, and Conservation Ecology. Lecture and lab instructor for 4 courses. Responsible for managing assigned courses and lab, student advising and mentoring, community outreach, and collaboration on STEM grants (USDA NRCT Program).

Courses taught:

FWCE 450 Special Topic: Natural Resource Management Field Techniques (lecture and lab)  
 FWCE 430 Avian Field Ecology (lecture and lab)  
 FWCE 393 Professional Experience and Communications  
 FWCE 450 Special Topic: Backcountry Wilderness

**Northern New Mexico College**  
 Espanola, NM

Date Employed: 8/2014 – 5/2017

**Assistant Professor (Environmental Science)**

**USDA NRCT Faculty Mentor**

Tenure-track position, Assistant Professor in Environmental Science, Department of Biology, Chemistry and Environmental Science. Lecture and lab instructor for over 12 courses in Environmental Science and Biology. Responsible for managing courses offered, management of labs, purchasing of lab and research equipment, student advising and mentoring, applying for research grants, community outreach, ecological field research, curriculum design, recruitment and mentoring of adjunct faculty. Faculty mentor and grant manager for the USDA NRCT Program at NNMC in collaboration with New Mexico State University.

STEM Activities managed or participating on-campus:

1. Southwest Natural Resource Conservation Training Academy (SWMRCT): Faculty mentor for 4-year USDA grant to improve recruitment and retention of students in natural resource fields in Hispanic-serving institutions (HSIs) (Spring 2016)
2. Espanola Valley Environmental Educators Training Academy (EVEETA): Faculty mentor for K-12 Teacher STEM Program, Spring-Summer 2015
3. NOYCE Teacher STEM Academy (Co-PI), Fall 2015-Spring 2016
4. STEM Scholars Mentor and Friday STEM Academy Mentor, Fall 2015
5. STEM Academy (Los Alamos National Lab grant) advisor for STEM program geared towards diversity of women and minorities, 8<sup>th</sup> grade focus, Fall 2015-Spring 2016
6. College Assistance Migrant Program (CAMP) Mentor, Spring 2015-Fall 2016
7. New Mexico Alliance for Minority Participation (NM-AMP) Mentor: 3 students

STEM Activities managed or participating off-campus:

1. Tribal Youth Environmental Summer Camp, Taos Pueblo (June 14-19, 2015), guest instructor for wildlife ecology lesson (4<sup>th</sup> grade-pre-college)
2. Southwest Natural Resource Conservation Training Academy (SWMRCT): Faculty mentor

Courses taught:

ES 112 Intro to Environmental Science (lecture and lab)  
 ES 201 Chemical and Physical Processes (lecture and lab)  
 ES 203 Intro to GIS, GPS, and Cartography (lecture and lab)  
 ES 225 Principles of Agroecology  
 ES 319 Principles of Wildlife Management (lecture/lab)  
 ES 320 Environmental Ethics (Blackboard online course)  
 ES 338 Environmental Laws and Policies (Blackboard online course)  
 ES 380 Undergraduate Research Experience (field/lab)  
 ES 415 Energy and Resource Development  
 ES 420 Ecology and Hydrology of the Southwest (lecture and field trip)

ES 480 Senior Capstone (Experimental Lab/Field Research Thesis)  
ES 499 Topics: Environmental Research Methods (lecture, field/lab)  
BIOL 499 Stream Ecology and Field Methods (lecture, field/lab)

Research collaborations:

1. Valles Caldera National Preserve: water quality monitoring of stream chemistry, monitoring impact of thinning and burning on soil chemistry
2. Bureau of Land Management: monitoring of stream macroinvertebrates in Rio Hondo, Pecos River (NM)
3. New Mexico Wildlife Center: monitoring stream macroinvertebrates at Lake Abiquiu
4. Taos Pueblo Department of Natural Resources: monitoring of Black bear population and vegetation

Committess served:

Undergraduate Curriculum Committee  
Scholastic Honors Committee  
Academic Standards Committee  
College Learning Assessment Committee (Information Technology Competence and Research)

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**University of New Mexico—Los Alamos**  
Los Alamos, NM

Date Employed: 6/2013

**Biology Instructor**

Adjunct professor for the Department of Science and Engineering.

Courses taught:

BIO 123: Biology for Health-Related Majors  
BIO 124L: Biology Laboratory for Health-Related Majors

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**Blinn College**  
Bryan, TX

Date Employed: Fall 2011, 2012, Spring 2013

**Biology Instructor**

Adjunct professor for the Department of Science and Engineering. Lecture and lab instructor. General Biology II material covered all basic concepts of biology from biological chemistry, genetics, cells, organisms, and ecology. (4 credit hours each, 3 sections); BIOL 1408 material covered all basic concepts of biology from biological chemistry, genetics, cells, organisms, and ecology. (4 credit hours each, 2 sections)

Courses taught:

BIOL 1407: General Biology II  
BIOL 1408: Introductory Biology

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**Texas A&M University**  
College Station, TX

Date Employed: Fall 2010-Spring 2011

**Laboratory Teaching Assistant (Ecology)**

Department of Renewable Natural Resources, Texas A&M University, College Station, TX. Instructor for a 3 hour laboratory consisting of lectures on ecological theory followed by applied field techniques in both terrestrial and wetland systems. Topics covered included vegetation sampling, capture and marking of wildlife, and population estimation methods for flora and fauna in terrestrial, lentic, and lotic systems. Taught 2 sections per semester. (2 sections each semester)

Courses taught:

REN-215: Fundamentals of Ecology Laboratory

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**Sul Ross State University**  
Alpine, TX

Date Employed: Fall 2007

**Co-Lecturer (Wildlife Resources)**

Department of Natural Resource Management. Co-Instructor for 1 hour lecture that met 3 times per week. Topics covered the entire span of the text "Wildlife Ecology and Management", 4<sup>th</sup> edition, by E.G. Bolen and W.L. Robinson.

Courses taught:

NRM-2302: Wildlife Resources

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**Texas A&M University**  
College Station, TX

Date Employed: Spring 2006, Fall 2006,  
Spring 2007

**Laboratory Teaching Assistant (Wildlife Techniques)**

Department of Wildlife and Fisheries Science. Instructor for laboratory consisting of wildlife techniques theory followed by applied field exercises. Topics covered included sampling techniques, capture and marking of wildlife, population estimation, home range analysis, and GIS. Taught 2 sections per semester.

Courses taught:

WFSC-408: Wildlife Techniques Laboratory

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**Texas A&M University**  
College Station, TX

Date Employed: December 2007- 2010  
Hours: Part-time

**Principal Investigator / Graduate Doctoral Field Research: Montezuma quail**

Design field research methods, procurement of field research materials. Apply for permits, submit grant proposals, submit reports to AZG&F and other funding agents. Trained and supervised 10 field research assistants. Conducted trapping, banding, and radio-telemetry monitoring of Montezuma quail. Organized database, conduct analysis of data, publish results in peer-reviewed journals. Presented research results at various professional meetings and conferences

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## **Private Consulting**

**National Hispanic Environmental Council**  
CA, NM, NY

Date Employed: Summers 2005-2015  
Hours: Seasonal

### **Lead Instructor: Ecological Field Instructor/Counselor**

Minority Youth Environmental Training Institute (MYETI). Lead instructor for STEM “Institutes” sponsored by the U.S. Forest Service, National Park Service, NRCS, EPA, and other participating federal agencies. Serve as lead field and classroom instructor, role model and counselor for various environmental/ecological programs held at the Pacific Region Institute (Santa Monica National Recreation Area and Channel Islands National Park, California), Northeast Region Institute (Gateway National Park, Ellis Island National Monument, and Fire Island National Park, New York), and the Glorieta Institute (New Mexico). Taught students lessons in ecology, wildlife management, water quality sampling, lentic and lotic aquatic sampling, career experience in the National Park Service, and pursuing undergraduate and graduate education in science.

**Atkins Consulting**  
Austin, TX

Date Employed: 8/2012 to 8/2013  
Hours: Part-time

### **Senior Scientist I**

Assisted in consultation process (NEPA), review of park legislature, and writing of the Feral Hog Management Plan for Big Thicket National Preserve. Advised park managers on which measures to take to reduce the impact of feral hog on the natural resources of the preserve.

## **Research Internships**

- **Resource Assistant**, Student Conservation Association Internship, Joshua Tree National Park, CA. March 2000-June 2000.  
Duties involved learning methods of distance sampling, radio tracking, data management, GPS PLGR operation, and monitoring of sensitive species.
- **Field Research and Lab Assistant**, Biology Department, Pomona College, Claremont, CA. Spring 1995-Spring 1998  
Assisted Dr. William O. Wirtz II with ecological field research on the impacts of fire on the ecology of vertebrates in coastal sage scrub (CSS) communities. This included the preparation and maintenance of field tools, trapping, handling and identification of live-trapped mammals, aves, or herps in the field. Monitored habitat and reproductive success of the threatened California gnatcatcher (*Poliopitila californica*).

## **Federal Work Experience**

**Big Thicket National Preserve**  
Beaumont, TX

Date Employed: 6/2004 to 8/2006  
Hours: 40+ hrs/ week

### **Wildlife Biologist (SCEP) (GS-7)**

SCEP graduate student. Full-time, intermittent, work schedule of 40+ hrs; 50% field work, 30% data management, 20% Supervisory

#### **Duties:**

1. Assist in reviewing, in cooperation with Texas A&M University, management measures for controlling feral hog (*Sus scrofa*) populations in the twelve units of the preserve. Examine appropriateness of field methods for monitoring feral hog populations. Meet with park professionals to review enabling legislation for future feral hog control programs.
2. Conduct a study of feral hog impacts to natural resources in the preserve. Method employed consisted of surveying 5 of the 12 units in the preserve, walking strip-transects, taking GIS referenced data, recording damage into an Access database, and producing maps in ArcGIS.
3. Supervise biological technicians for the feral hog impact survey. Assist in supervising a crew of student biological technicians working on the Texas trailing phlox recovery and monitoring program. Provide guidance in report writing and map production.
4. Assist Gillian Bowser, Ph.D. (GCCESU Coordinator for NPS at Texas A&M University) Stewardship for NPS, regarding the need to develop a program for controlling feral animals.
5. Assist Curtis Hoagland, Chief of Resources, in setting of mist nests and bird banding for MAPS migratory bird studies. Conduct outreach presentations for volunteer opportunities at BTNP

**Channel Islands National Park**  
Ventura, CA

Date Employed: October 2002-June 2004  
Hours: 40+ hrs/ week

### **Island Fox/Wildlife Biological Science Technician (GS-5)**

Biological science technician. Full-time work schedule of 40+ hrs; 90% field work, 10% data management.

#### **Duties:**

1. Assist in implementing management measures for Island Foxes (*Urocyon littoralis*), with the responsibility for the care and handling of foxes held for the captive breeding program. I spend two tours (8 days per tour) a month on an island by myself overseeing the maintenance and improvement of the captive fox facilities, monitoring the health and behavior of the captive foxes, and managing reports, information and computer databases related to the welfare of the foxes.
2. Assist with the capture and handling of vertebrates (*Peromyscus maniculatus*, *Sceloporus occidentalis*, *Elgaria multicarinata*, *Batrachoseps pacificus*) following established protocols (mouse grids and herptile coverboard transects) for the Inventory and Monitoring program
3. Assist with landbird monitoring using informal surveys or point-count protocols.
4. Monitor wild foxes using radiotelemetry, remote cameras and live trapping; Conduct limited review of time-lapse video monitoring tapes of fox reproductive behavior. Using an ethogram, identify if foxes are exhibiting social behaviors and which behaviors may be indicative of successful or unsuccessful breeding.
5. Submit weekly trip reports to the Field Lead Tech, Wildlife Biologist, and Terrestrial biologist noting the status of island fox operations. Create Powerpoint presentation for Island Fox Husbandry Meeting at the Santa Barbara Zoo.
6. Tend to ranger duties by myself on San Miguel Island when the resident Ranger is not present. These duties include the maintenance of Ranger Station facilities, transmitting weather reports and assessing transportation conditions for Dispatch, and tending to Visitor-use needs (campground and trail maintenance, visitor safety, and escorting visitors on interpretive hikes).



**Joshua Tree National Park**  
 Twenty-nine Palms, CA

Date Employed: 6/2000 – 10/2002  
 Hours: 40+ hrs/ week

### **Wildlife Biologist/ Biological Technician (GS-5/6)**

Biological science technician and wildlife biologist. Full-time work schedule of 40+ hrs; 80% field work, 20% data management.

#### **Duties:**

1. Represented Joshua Tree National Park's Resources Management Division in the Desert Tortoise Council Symposium; presented poster: On the Road to Recovery: Protecting the Desert Tortoise During a Federal Highways Project in Joshua Tree National Park
2. Apply for Federal and State Scientific Collection Permits
3. Obtained scientific handling permit (biological monitor) for the threatened desert tortoise (*Gopherus agassizii*).
4. Perform Section 7 surveys for Desert Tortoises in Lower Covington Flats, an area proposed for an experimental Blackbrush burn
5. Submit reports and perform informal consultation with USFWS regarding Desert Tortoise issues
6. Monitor desert tortoises and their habitat in areas designated for road improvements.
7. ArcView and Trimble GPS used to generate maps and reports for the USFWS.
8. Perform informal surveys of other wildlife affected in the area proposed for an experimental Blackbrush burn. This included assessing rodent communities through live-trapping (sherman traps), assessing herptile and invertebrate communities through the use of pit-traps, and assessing bird communities through visual point-count census. Genus handled include *Onychomys*, *Peromyscus*, *Perognathus*, *Chaetodipus*, *Dipodymis*, *Sceloporus*, *Xantusia*, *Elgaria*, *Masticophis*, *Pituophis*, and invertebrates.

### **Biological Monitor/ Field Contact Representative (wildlife technician) ( 4/2001-8/5/2002)**

9. Responsible for overseeing compliance with protective measures for the desert tortoise in regards to USFWS biological opinion on Federal Highways road construction Project #173.
10. Follow Section 7 USFWS protocols for monitoring Desert Tortoises and their habitat
11. Obtained scientific handling permits (biological monitor) for the threatened desert tortoise.
12. Use Trimble GPS dataloggers to collect GIS information
13. Manage GIS databases using Pathfinder Software and Arcview 3.2a
14. Served as crew leader for a desert tortoise mitigation survey of the proposed Federal Highways road construction Project #291. Duties include those under Section 7 of Fish and Wildlife protocol for monitoring of desert tortoise and its habitat. Used PLGR GPS, TrackPlan software, and ArcView to generate maps. Submitted desert tortoise survey report to NPS Denver Service Center for later inclusion in the greater biological assessment submitted to the USFWS.

### **Vegetation technician (10/2000 – 4/2001)**

15. Participated in plant salvaging and restoration for Federal Highways construction Project #291.
16. Increased knowledge of desert flora and techniques for potting, boxing, and revegetation.
17. Assisted in building an irrigation system for the plants salvaged in the project. Learned how to operate tractor, forklift, small jackhammer, small chainsaw.

### **Biological Science Technician(6/2000 – 8/2000)**

18. Promoted to GS-404-05 to continue research at Joshua Tree National Park on the Desert Tortoise Recovery Project. Methods included distance (transect) sampling via GPS PLGR navigation;
19. Helped set radio transmitters to track desert tortoises. Monitored the threatened *Gopherus agassizii* and created an ArcView map for presentation in ESRI booth.
20. Used *CalHome* software to produce MCP estimates of radio-tracked tortoise' home ranges.
21. Organized computer databases, assisted in entry. Organized a tape backup system over a network.

## **Publications, Dissertations, Theses**

- Karam, M., Chavarria, P., and F. Albuquerque. 2021. Increased risks to aviation from a sympatric columbid along an agricultural-urban interface: implications for local hazard mitigation. PeerJ (in review)
- Randel, C., Johnson, C., Chavarria, P., Lopez, R., Silvy, N., and J. Tomeček. 2019. Estimating Montezuma Quail Hatch Date using Primary Molt at Harvest. Willife Society Bulletin 43(4):766-768
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, D. S. Davis, and A. Montoya. 2017. Seasonal range and movements of Montezuma quail in SE Arizona. Proceedings of the National Quail Symposium 8; July 24, 2017
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, D. S. Davis, and A. Montoya. 2017. Survival demographics of Montezuma quail in southeast Arizona. Proceedings of the National Quail Symposium 8; July 24, 2017
- Chavarria, P. M. 2013. Ecology of Montezuma Quail in Southeast Arizona. Dissertation. Texas A&M University, College Station, TX, USA.
- Chavarria, P. M., A. R. Koczek, N. J. Silvy, and R. R. Lopez. 2012. Use of portable infrared cameras to facilitate detection and capture success of Montezuma quail. Proceedings of the National Quail Symposium 7:333–338.
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, C. Hass, and L. Kennedy. 2012. Post-fire succession and Montezuma quail in a semidesert grassland of southeast Arizona. Proceedings of the National Quail Symposium 7:339–345
- Chavarria, P. M., A. Montoya, N. J. Silvy, and R. R. Lopez. 2012. Impact of inclement weather on overwinter mortality of Montezuma quail in southeast Arizona. Proceedings of the National Quail Symposium 7:346–351.
- Chavarria, P. M., R. R. Lopez, G. Bowser, and N. J. Silvy. 2007. A landscape-level survey of feral hog impacts to natural resources of the Big Thicket National Preserve. Human–Wildlife Conflicts 1(2):199–204.
- Chavarria, P. M. 2006. Assessing the impact of feral hog populations to the natural resources of Big Thicket National Preserve. M.S. Thesis. Texas A&M University, College Station, TX, USA.
- Chavarria, P. M., R. R. Lopez, G. Bowser, and N. J. Silvy. 2006. An assessment of white-tailed deer (*Odocoileus virginianus*) and feral hog (*Sus scrofa*) populations at Big Thicket National Preserve, Texas. Pages 67–70 in D. Harmon, editor. People, places, and parks: proceedings of the 2005 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. Hancock, Michigan, USA.
- Chavarria, P.M., R. R. Lopez, R. Rivera, T. Defex, M. Piña Jr., M.R. Gutierrez. 2007. La Vida Verde: Hispanic engagement in natural resource conservation and education. Pages 36–39 in D. Harmon, editor. Protected Areas in a Changing World: proceedings of the 2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. Hancock, Michigan, USA
- Chavarria, P. M. 1999. Competitive interactions of *Sceloporus orcutti* and *Sceloporus occidentalis* in coastal sage scrub community in southern California. B.A. Thesis. Pomona College, Claremont Colleges, Claremont, CA, USA.

## **Professional Service, Presentations, and Invited Talks**

- Formulation of an ethogram for evaluating vocalization behaviors of Ring-tailed lemurs (*Lemur catta*) in captive enclosures. Authors: Jose Rodriguez, Dr. Pedro Chavarria, Dr. Will Whitham, Cara Hutson. Academic Research Symposium, TAMUC, Spring 2024. *Conference poster*
- Determination of risk factors associated from proximity of White-tailed Deer (*Odocoileus virginianus*) to livestock through fecal pellet count surveys. Authors: Samantha Marshall, Julia Zhu, Ethan Watson, Jose Rodriguez, Dr. Pedro Chavarria. Academic Research Symposium, TAMUC, Spring 2024. *Conference poster*
- The livestock-wildlife interface of the TAMUC livestock farm: Large ungulate and mesomammal diversity and its management implications  
Authors: Ethan Watson, Julia Zhu, Jose Rodriguez, Samantha Marshall, Tanner Bratcher, Dr. Pedro Chavarria. Academic Research Symposium, TAMUC, Spring 2024. *Conference poster*
- The gastrointestinal parasite burden of White-tailed deer (*Odocoileus virginianus*) and implications at the livestock-wildlife interface Authors: Julia Zhu, Jose Rodriguez, Samantha Marshall, Ethan Watson, Dr. Pedro Chavarria. Academic Research Symposium, TAMUC, Spring 2024. *Conference poster*
- Lion's Lecture Series (Texas A&M—Commerce): "Where the Wild Things Are: One-Health and Wildlife Management). October 22, 2024
- Heritage University Gathering of Scholars Symposium, April 2019. Lead Organizer.
- M.J. Murdock College Science Research Program Conference, November 2018. Undergraduate poster competition judge.
- Heritage University Gathering of Scholars Symposium, April 2018. Lead Organizer.
- USDA PI Conference 2017. Poster Competition Lead Coordinator.
- Chavarria, P. M.. 2017. The Impact of Stochastic Events on Montezuma Quail Ecology. New Mexico State University, Department of Fish, Wildlife, and Conservation Ecology Seminar. November 8, 2017.
- Chavarria, P. M.. 2016. Engaging and Enhancing Opportunities for Hispanic and Native American Students in Natural Resource Management. Heritage University Seminar for The Center for Indigenous Health, Culture and Environment. September 30, 2016.
- Chavarria, P. M.. 2015. Demystifying the Montezuma quail: Understanding its ecology in the midst of climate change. Northern New Mexico College Biology Seminar. September 4, 2015. *Invited talk*
- Chavarria, P. M.. 2010. Update on Montezuma quail research: Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ. March 13, 2010. *Invited talk*
- Chavarria, P. M.. 2009. Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ. February 21, 2009. *Invited talk*
- Chavarria, P. M.. 2009. Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Quail Unlimited, Sierra Vista Chapter, Sierra Vista, AZ. June 2, 2009. *Invited talk*
- Chavarria, P. M. 2007. Management considerations of invasive species in the National Pork (Park) Service: Case studies of feral hogs. University of Missouri-Columbia, MO. April 5, 2007. *Invited talk, guest lecturer*

- Chavarria, P.M., R. R. Lopez, R. Rivera, T. Defex, M. Piña Jr., M.R. Gutierrez. 2007. La Vida Verde: Hispanic engagement in natural resource conservation and education. The 2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. *Conference presentation*
- Chavarria, P.M. 2006. A landscape-level survey of feral hog impacts to natural resources of the Big Thicket National Preserve. Feral Hog Symposium, Mobile, Alabama. *Conference presentation*
- Chavarria, P.M. 2007. Feral hog (*Sus scrofa*) impacts to the vegetation communities of Big Thicket National Preserve, TX. 2007 Big Thicket Conference, Beaumont, TX. *Conference presentation*
- Chavarria, P.M. 2007. Feral hog (*Sus scrofa*) impacts to the vegetation communities of Big Thicket National Preserve, TX. 2007 Texas Chapter of The Wildlife Society Conference. Amarillo, TX. *Conference poster*
- Chavarria, P. M. 2005. An assessment of white-tailed deer (*Odocoileus virginianus*) and feral hog (*Sus scrofa*) populations at Big Thicket National Preserve, Texas. 2005 Texas Chapter of The Wildlife Society Conference, Beaumont, TX. *Conference poster*
- Chavarria, P.M. 2006. A passion for life: My life's journey in wildlife research with the National Park Service. Texas A&M University Zoological Society. March 1, 2006. *Invited talk*
- Chavarria, P.M. 2002. On the road to cooperation: Protecting the desert tortoise during a federal highway project in Joshua Tree National Park. 27<sup>th</sup> Desert Tortoise Council Symposium. March 22, 2002. *Conference poster*

## **Honors and Awards**

- TAMU-Commerce Teaching Award: "Unfettered Thought" in Research, Scholarship, and Creative Activities(2022-2023)
- Ariel Appleton Research Fellowship, 2010. Montezuma quail research on the Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ.
- Audubon's Apacheria Fellowship, 2010. Montezuma quail research on the Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ.
- Texas A&M University Graduate Diversity Fellowship 2006-2010
- Alfred P. Sloan Foundation Graduate Diversity Fellowship 2007-2010
- Hispanic Leadership Program in Agriculture and Natural Resources (HLPANR), Graduate Student Fellowship (Texas A&M University), Fellow, 2004-present
- Gamma Sigma Delta, International Honor Society of Agriculture, Associate Member of Texas A&M University Chapter, 2005.
- Sigma Xi, Scientific Research Honor Society, Associate Member of the Claremont Colleges Chapter, 1996
- George Wright Society (GWS) Graduate Student Travel Scholarship (2005, 2007)
- Minorities in Agriculture and Natural Resources and Related Sciences (MANRRS), Cargill Animal Nutrition Graduate Scholarship
- MANRRS Participation Points Award, 3<sup>rd</sup> Place
- MANRRS National Conference 2005. Research Discussion Contest, Finalist.
- NSF Research Experience for Undergraduates (REU) Research Grant (fellowship), 1995-1997
- California Alliance for Minority Participation (CAMP) Research Grant (fellowship), 1997

## **Professional Grant Writing Activity**

- Latino Staff and Faculty Association, Provost Award, \$15,000; Submitted a proposal to support activities for Fall 2024-Spring 2025 including Hispanic Heritage Month Invited guest speaker, College of Music invited performers, and outreach and recruitment initiatives
- Welder Wildlife Foundation Research Fellowship: Cervid Species in Texas as Potential Reservoirs of Anthelmintic Resistant Intestinal Parasites from Domestic Bovine Herds. Julia Zhu and Dr. Pedro Chavarria. Amount Requested: \$42,330 (October 2023), Not Awarded
- Welder Wildlife Foundation Research Fellowship: Cervid Species in Texas as Potential Reservoirs of Anthelmintic Resistant Intestinal Parasites from Domestic Bovine Herds. Julia Zhu and Dr. Pedro Chavarria. Amount Requested: ~\$25,000 (October 2024), Not Awarded
- USDA-National Institute of Food and Agriculture: North Texas Alliance for Urban Agricultural Education. Accepted. Total Awarded: \$748,455.00 Project Start Date: 09/01/2023, Project End Date. Applied as Co-PI.
- NSF 19-540: Improving Undergraduate STEM Education: Hispanic- Serving Institutions (HSI Program): **Building Capacity: Culturally Responsive Education in Science, Technology, Engineering, and Mathematics (CRESCENT)**; Requested: \$2,499,997; Submitted March 2019; Accepted (June 26, 2019); Applied as Co-PI
- National Environmental Education Federation: Hands-on-the-Land Grant: **Project Topp-Rangers (Toppenish Rangers)**; Requested: \$5,000; Submitted February 2018; Accepted (April 2018)
- American Birding Association: Spark Bird Project grant; Award: \$2800 (binoculars); Submitted February 2018; Accepted (April 2018)
- NSF S-STEM (NSF 17-527): **Engagement Achievement and Graduation for Low-income Students (EAGLES): a partnership in STEM education**; Heritage University, subrecipient Co-PI; Accepted July 2019.
- NSF 18-524: Improving Undergraduate STEM Education: Hispanic- Serving Institutions (HSI Program): **Building Capacity: CREST (Culturally Responsive Education in STEM)**; Requested: \$1,499,577; Submitted March 2018; Excellent reviews. Not awarded. Applied as PI.
- USDA NIFA Grant: **Southwest Natural Resource Career Track Program (SWNRCT): Preparing Students For Success In Natural Resource Fields**. PI: Martha Desmond, Ph.D (New Mexico State University); Subrecipient PI: Pedro Chavarria, Ph.D. (Northern New Mexico College). 4-year subaward amount requested: \$178,000; Accepted (September 2015)
- Arizona Bird Conservation Initiative Grant; PI; Requested: \$10,000. **Population dynamics, habitat characteristics, and landscape genetics of Montezuma (Mearns' quail) in southeastern Arizona**; October 2010

## **Specialized Training and Coursework**

- **US 497.02E Leading US: A Practical Guide to Leadership Development in Higher Education** (TAMU-Commerce, Fall 2023)
- **Wildlife Handling and Chemical Immobilization.** Global Wildlife Resources (Dr. Mark R. Johnson, DVM) September 24-26, 2018 (Certified)
- **Hispanic Servicing Institutions (HSI) Faculty Institute on Data Driven Teaching and Learning** (Escala Educational Services) July 31-August 4, 2016
- **Project WILD (Wildlife Education)**, 2006
- **Project Learning Tree (Environmental Education)**, 2015
- **Introduction to Wilderness Management**, NPS JOTR, 2000
- **Inventory and Monitoring Natural Resources**, NPS Channel Islands NP, 09/01
- **Fire Resource Advisor** , NPS/BLM, 05/02
- **S-130 Basic Wildfire Firefighter Training**, NPS/BLM, 05/02 – Spring 2004

## **Professional Activities and Affiliations**

- TAMU-Commerce Latino Staff and Faculty Association, Interim President (Fall 2024)
- The Wildlife Society, National/Texas/Arizona Chapters, Member. 2005; 2022-2025
- Noyce Academy STEM Faculty Mentor (Northern New Mexico College), Fall 2016-Spring 2017
- Environmental Educators Association of New Mexico (EEANM):  
Board Member (November 2015-October 2016), Member (Spring 2015-Fall 2016)
- Sigma Xi, Scientific Research Honor Society, Associate Member of the Claremont Colleges Chapter, 1996-current.
- Pathways Working Group (Natural Resource Careers with Federal Government), 2014-current
- Society for Advancement of Chicanos and Native Americans in Science (SACNAS) 2014-current
- Gamma Sigma Delta, International Honor Society of Agriculture, Associate Member of Texas A&M University Chapter, 2005.
- 2025
- Minorities in Agriculture and Natural Resources and Related Sciences (MANRRS),  
Member, Texas A&M Chapter (2004-2006). Have served as speaker and presenter at educational conferences and banquets.
- George Wright Society (GWS), Student Member, 2005-2007.
- Society for Conservation GIS (SCGIS) Member, 2000-2001

## Skills

- **Computer Hardware:** Hardware installation and troubleshooting, server administration, intermediate knowledge (Novell or Microsoft network), Intermediate knowledge of networking, routing
- **Computer Software:** *ArcView 3.2a, ArcGIS, and QGIS* map production and spatial analysis; *Home Range Analysis* software; Microsoft Office: *Word, Excel, Powerpoint, Access*; Statistical Analysis: *R, SPSS, Minitab, JMP*; *HTML* language; Advanced internet user (FTP, TCP/IP); Graphics and Video editing: *Paintshop Pro, Photoshop, Premiere*; Software and OS installation, debugging, troubleshooting (WIN or DOS)
- **Field Ecology**
  - **Wildlife Trapping and Monitoring:** Use of primitive and specialized traps for capture of amphibians, reptiles, mammals, aves, insects. Examples included: drift fence grids with pit traps for herptiles, small mammals, insects; Sherman trap and Havahart trap grids for small mammals and mesomammals; mist-nest transects for birds; portable and stationary infra-red cameras for passive or active monitoring during day or nighttime; dip-nets, plankton tow-nets and seine nets for monitoring lentic, lotic, and marine fauna; ear-clipping, surgical bead-marking, leg-banding, and transmitter mounting for marking; radio-telemetry for active monitoring; distance sampling and mark-resight.
  - **Vegetation Sampling:** Use of varios techniques including point-quarter-quadrat method, line intercept, quadrat sampling, transects, distance-sampling, and use of GIS remote-sense imagery for determination of cover, abundance, and diversity.
- **Environmental Sampling**
  - **Water and Air Quality Sampling:** Use of water quality kits to test for presence of nitrates, phosphates, turbidity, pH, salinity, temperature and other environmental components; Use of specialized weather station (NOAA) equipment for water testing such as thermograph, rain gauge and air quality sensors and filters; field use of portable Kestrel sensors, YSI multiparameter water quality portable meters; Hach environmental monitoring equipment (spectrometers, turbidity meters, etc.); LaMotte SMART Water Quality chemistry kit
  - **Soil Quality Sampling:** GEMPLER'S® Professional Soil Quality Test Kit and the LaMotte STH Series Professional Soil Testing Outfit was used to conduct a thorough assessment of the soil respiration, infiltration, bulk density, salinity (EC), pH, soil nitrate, aggregate stability, compaction, soil structure, soil texture, water quality, nitrite nitrogen, ammonia, nitrogen, phosphorus, potassium, humus, magnesium, calcium, sulfate, aluminum, chlorides, ferric iron, manganese, and green plant tissue tests using techniques provided with the test kit.
- **Languages:** Spanish: proficient in writing, reading, speaking.