# Michael E. Tewes, Ph.D.

Regents Professor, Texas A&M University System The Frank D. Yturria Endowed Chair in Wild Cat Studies Caesar Kleberg Wildlife Research Institute Texas A&M University-Kingsville 700 University Blvd, MSC 218 Kingsville, TX 78363 Email: <u>michael.tewes@tamuk.edu</u> / Office phone: 361-593-3972

# EDUCATION

Ph.D.	University of Idaho	August 1986	Wildlife Resources
M.S.	Texas A&M University	May 1982	Wildlife Ecology
B.S.	Texas A&M University	May 1979	Wildlife Ecology

# CERTIFICATION

1981 - Certified Wildlife Biologist; 1977 - Member of The Wildlife Society

# SCIENTIFIC PUBLICATIONS

## Journal Articles

Sergeyev M, EP Tanner, MJ Cherry, JV Lombardi, TA Campbell, ME Tewes. 2023. Influence of abiotic factors on habitat selection of ocelots and bobcats: testing the interactive range limit theory. Frontiers in Ecology & Evolution Front. Ecol. Evol., 29 November 2023 Sec. Conservation and Restoration Ecology Volume 11 - 2023 | <u>https://doi.org/10.3389/fevo.2023.1166184</u>

Sergeyev, M, DA Crawford, JD Holbrook, JV Lombardi, ME Tewes, TA Campbell. 2023. Selection in 3D: Assessing individual variation in habitat selection of ocelots, bobcats, and coyotes using LiDAR-derived canopy metrics. Remote Sensing in Ecology and Conservation 15 November 2023 <u>https://doi.org/10.1002/rse2.369</u>

Sergeyev, M, MJ Cherry, EP Tanner, JV Lombardi, ME Tewes, TA Campbell. 2023. Multiscale selection and avoidance of carnivores by endangered ocelots. Scientific Reports *Sci Rep* **13**, 8882 (2023). <u>https://doi.org/10.1038/s41598-023-35271-9</u>

Sergeyev M, JV Lombardi, ME Tewes, TA Campbell. 2023. Ocelots in the moonlight: influence of lunar phase on habitat selection and movement of two sympatric felids. PLOS One Published: November 30, 2023 <u>https://doi.org/10.1371/journal.pone.0286393</u>

Branney AB<sup>+</sup>, S Carvajal<sup>+</sup>, Lombardi JV<sup>+</sup>, WC Stasey, ME Tewes, A Caso. 2023. Community structure, spatial and temporal overlap of a diverse carnivore guild in the Sierra Tamaulipas, Mexico. Global Ecology and Conservation. Volume 44, August 2023, e02493 <u>https://doi.org/10.1016/j.gecco.2023.e02493</u>

Lombardi JV<sup>+</sup>, TJ Yamashita<sup>+</sup>, A Blackburn, JH Young Jr, ME Tewes, CJ Anderson. 2023. Examining the Spatial Structure of Woody Cover Within a Highway Road Effect Zone for Ocelots in Texas. Urban Ecosystems *Urban Ecosyst* **26**, 1057–

Blackburn, A. L.J. Heffelfinger, A.M. Veals, M.E. Tewes, J.H. Young, Jr., 2021. Cats, cars, and crossings: the consequences of road networks for the conservation of an endangered felid. Global Ecology and Conservation 27 <u>https://doi.org/10.1016/i/gecco/.2021.01582</u>

Blackburn, A., C.J. Anderson, A.M. Veals, M.E. Tewes, D.B. Wester, J.H. Young Jr., R.W. DeYoung, and H.L. Perotto-Baldivieso. 2021

- Carvajal-Villarreal, S., A. Caso, P. Downey, A. Moreno, M.E. Tewes, L.I. Grassman Jr. 2012. Spatial patterns of the margay (*Leopardus wiedii*; Felidae, Carnivora) at "El Cielo" Biosphere Reserve, Tamaulipas, Mexico. Mammalia 76:237-244.
- Harveson, P.M., L.A. Harveson, L. Hernandez-Santin, M.E. Tewes, N.J. Silvy, and J.T. Pittman. 2012. Characteristics of two mountain lion (*Puma concolor*) populations in Texas. Wildlife Biology 18:58-66.
- Holbrook, J.D., R. DeYoung, J.E. Janecka, M.E. Tewes, R.L. Honeycutt, and J.H. Young. 2012. Genetic diversity, population structure, and movements of mountain lions, *Puma concolor*, in Texas. Journal of Mammalogy 93:989-1000.
- Holbrook, J.D., R. DeYoung, M.E. Tewes, and J.H. Young. 2012. Demographic history of an elusive carnivore: using museums to inform management. Evolutionary Applications 5:619-628.
- Holbrook, J.D., R. DeYoung, A. Caso, M.E. Tewes, and J.H. Young. 2012. Hog-nosed skunks (*Conepatus leuconotus*) along the Gulf of Mexico: population status and genetic diversity. Southwestern Naturalist 57:223-225.
- Gilad, O., J.E. Janecka, F. Armstrong, M.E. Tewes, And R.L. Honeycutt. 2011. Mountain lions in Guadalupe Mountains National Park: estimates of occurrence and distribution through DNA analyses. The Southwestern Naturalist 56:297-304.
- Holbrook, J. D., R. DeYoung, M.E. Tewes, J. Young, J. Mays, and E. Meyers. 2011. Natural dispersal or illegal pets? Limitations on assigning origin to road-killed ocelots in the southwestern United States. Wildlife Society Bulletin 35:504-507.
- Janecka, J.E., M.E. Tewes, L.L. Laack, A. Caso, L.I. Grassman Jr., A.M. Haines, D. B. Shindle, W.J. Murphy, R.L. Honeycutt. 2011. Reduced genetic diversity and isolation of remnant ocelot populations occupying a severely fragmented landscape in southern Texas. Animal conservation 14:608-619.
- Young, J.H., M.E. Tewes, A.M. Haines, G. Guzman, and S.J. DeMaso. 2010. Survival and mortality of cougars in the Trans-Pecos Region. The Southwestern Naturalist 55:412-419.
- Horne, J.S., A.M. Haines, M.E. Tewes, and L.L. Laack. 2009. Habitat partitioning by sympatric

<sup>th</sup> International Mammalogical

Congress (Belfast, Ireland, 11-16 August 2013). In press.

- DeYoung, R., J.D. Holbrook, M.E. Tewes, and J.H. Young. 2012. Using museums to inform management: Genetic insights into Texas mountain lion populations. Pages 30 -32 in P.H. Dickerson and R.T. Gage, editors. Proceedings of the Trans -Pecos Wildlife Conference-2012. Sul Ross State University, Alpine, Texas. (M.S. student Holbrook)
- Holbrook, J. D., R. W. DeYoung, M.E. Tewes, and J.H. Young. 2011. Demographic history of mountain lions in Texas. Pages 97-103 *in* Williams, J., H. Robinson, and L. Sweanor, editors. Proceeding of the 10 <sup>th</sup> Mountain Lion Workshop, May2 -5, 2011. Bozeman, Montana, USA.
- Grassman, L.I., Jr., J. Janecka, and M.E. Tewes. 2006. Ecological separation of *Martes flavigula* with five sympatric mesocarnivores in north-central Thailand. Pages 63-76 in *Martes* in carnivore communities: proceedings of the Fourth International *Martes* Symposium, Lisbon, Portugal (Margarida Santos-Reis, Johnny D. S. Birks, Erin C. O'Doherty, Gilbert Proulx, eds.) Alpha Wildlife Publications, Sherwood Park, Alberta, Canada.
- Haines, A.M., A. Caso, M.E. Tewes, and E.J. Redeker. 2006. Using Landsat imagery to identify potential ocel of habitat in Tamaulipas, Mexico. Proceedings of the 20<sup>th</sup> Biennial Workshop on Aerial Photography, Videography, and High Resolution Digital Imagery for Resource Assessment #71, Weslaco, Texas, USA.
- Tewes, M.E., J.M. Mock, and J.H. Young. 2002. Bobcat predation on quail, birds, and mesomammals. Pages 65-70 in S.J. DeMaso, W.P. Kuvlesky, Jr., F. Hernandez, and M.E. Berger, eds. Quail V: Proceedings of the Fifth National Quail Symposium 5:65-70, Texas Parks and Wildlife Department, Austin, Texas, USA.

Society for Photogrammetry and Remote Sensing and U.S.D.A. Subtropical Agricultural Research Laboratory. Weslaco, Texas, April 29-May 1.

- Harveson, L.A., M.E. Tewes, N.J. Silvy, and J. Rutledge. 1996. Mountain lion research in Texas: past, present, and future. Proceedings of the 5<sup>th</sup> Mountain Lion Workshop. San Diego, California.
- Tewes, M.E., L.L. Laack, and A. Caso. 1995. Corridor management for ocelots in the United States and northern Mexico. Pages 444-446 *in* J.A. Bissonette and P.R. Krausman, eds. Integrating people and wildlife for a sustainable future. Proceedings of the first International Wildlife Management Congress. The Wildlife Society, Bethesda. Md. USA.
- Young, J.H., and M.E. Tewes. 1994. Evaluation of techniques for initial restoration of ocelot habitat. Proc. Annu. Conf. Southeast. Assoc. Fish and Wildlife Agencies.31:336-342.
- Keener, J.M., and M.E. Tewes. 1994. Seed preferences of nongame birds in the Rio Grande Valley. Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agenicies. 31:
- Tewes, M.E. 1994. Habitat connectivity: its importance to ocelot management and conservation. Pages 290-296 *in* A. Vega, ed. Conservation corridors in the Central American Region. Proceedings of the Paseo Pantera Regional Conference. Gainesville, Florida, USA.
- Navarro-Lopez, L.D., J.H. Rappole, and M.E. Tewes. 1993. Distribution of the endangered ocelot (*Felis pardalis*

- Tewes, M.E. 2002. Desert puma: evolutionary ecology and conservation of an enduring carnivore. Journal Wildlife Management (book review).
- Rappole, J.H., D. Navarro-Lopez, M. Tewes, and D. Everett. 1986. Remote-trip cameras as a means for surveying for nocturnal felids. Pages 45-52 *in* Nocturnal mammals: techniques for study (R.P. Brooks, ed.). School of Forest Resources Papers, Pennsylvania State Univ., University Park, 48:1-57.
- Tewes, M.E., and D.D. Everett. 1986. Status and distribution of the endangered ocelot and jaguarundi in Texas. Pages 147-158 *in* Cats of the World: Biology, Conservation, and Management (S.D. Miller, and D.D. Everett, eds.). National Wildlife Federation, Washington, D.C., 501 pp.

# Awards and Honors

Honorary Alumni Award for National and International Achievements, College of Natural Resources, University of Idaho, Mar. 2023 Educator of the Year Award, Texas Chapter of The Wildlife Society, Feb. 2020 Best Popular Article Award, Texas Chapter of The Wildlife Society, Feb. 2020 Selected as the 37 Annual Faculty Lecture Texas A&M University-Kingsville, Apr. 8, 2019 Honorary Membership Award, Texas Society of Mammalogists, Feb. 2018 Best Popular Article Award, The Wildlife Professional-TWS, TX Chap. of The Wildlife Soc., 2018 Best Scientific Article Award, Texas Chapter of The Wildlife Society, 2016 Outstanding Service Award, Texas Chapter of The Wildlife Society Feb. 22, 2013 Publication Award, Texas Chapter of The Wildlife Society, Feb. 22, 2013 Publication Award- "George Miksch Sutton Award in Conservation Research," Southwestern Association of Naturalists, Apr. 2010. Holder, The Frank Daniel Yturria Endowed Chair for Wild Cat Studies, Caesar Kleberg Wildlife Research Institute, Texas A&M University-Kingsville. Sep. 2008 to Present. Regents Professor, by the Board of Regents, the Texas A&M University System, 2007 to Present. Mid-Career Alumni Achievement Award, College of Nat Resources, Univ. of Idaho, Apr. 2008. Publication Award- "Best Scientific Article" for "Ecology of three sympatric felids in a mixed evergreen forest in north-central Thailand. Journal of Mammalogy 86:29-38." Texas Chapter of The Wildlife Society, South Padre Island, Feb. 2006 Invited speaker at the Coastal Bend Photo Contest Banquet - gave tribute to Dr. Lynn Drawe, Director, Welder Wildlife Refuge, Oct. 2006 Senior Researcher Award, College of Agri. & Human Sciences, Texas A&M-Kingsville, 2004 Publication Award, Texas Chapter of The Wildlife Society, Tyler, Mar. 2003 Invited as Plenary Speaker for the 37<sup>th</sup> Annual Meeting of the Texas Chapter of The Wildlife Society, Mar. 2002 Invited as Plenary Speaker for the 6<sup>th</sup> Mountain Lion National Conference, 2000 Javelina Alumni Association's Distinguished Research Award, Texas A&M University- Kingsville, May 1997 The Lotty Award, Endangered Species Conservation Federation, Aug. 1992 Conservation Award, U.S. Committee of the United Nations Environment Programme, Capitol Hill, Washington, D.C., Sep. 1991

Chevron Conservation Award, Washington, D.C., May 1991 Wildlife Conservationist of the Year, Sportsmen Conservationists of Texas, Austin, Apr. 1991 Publication Award, Texas Chapter of The Wildlife Society, Tyler, Apr. 1991 1<sup>st</sup> Recipient of Faculty Service Award, College of Agriculture and Human Sciences, Texas A&M University at Kingsville, 1991

Keynote speaker for the Texas Mammal Society Annual Conference, 1988 Certified Wildlife Biologist, The Wildlife Society, Washington, D. C., Apr. 1981

## Scientific Presentations

Number of scientific presentations since 1986 through 2023: 433					
(Details of the presentations can be provided upon request.)					
2023-6					
2022-21	2016-10	2010-18	2004-21	1998-7	1992-6
2021-35	2015-15	2009-13	2003-13	1997-17	1991-8
2020-19	2014-7	2008-8	2002-9	1996-5	1990-2
2019-33	2013-8	2007-14	2001-4	1995-10	1989-6
2018-7	2012-16	2006-14	2000-7	1994-7	1988-4
2017-29	2011-13	2005-13	1999-9	1993-3	1987-6

## Grantsmanship

Overall Grantsmanship: \$12,155,271 (through 2023) (Details of the grants can be provided upon request.)

External Grants

Total: \$10,670,931 (1986-2023)		
2023: 4,074,223		
2022: 606,625	2009: \$57,500	
2021: \$508,750	2008: \$305,345	
2020: \$387,891	2007: \$57,300	
2019: \$549,572	2006: \$44,000	
2018: \$374,349	2005: \$30,500	
2017: \$510,220	2004: \$128,540	
2016: \$175,500	2003: \$105,500	
2015: \$186,000	2002: \$96,868	
2014: \$138,000	2001: \$117,000	
2013: \$178,670	2000: \$139,892	
2012: \$226,974	1999: \$109,315	
2011: \$143,600	1998: \$65,645	
2010: \$357,525	1997-1998: \$109,917	
Undated, 1993-1997: \$100,000+ for Ocelot Genetics Project		

1996-1997: \$204,500 1995-1996: \$136,400 1994-1995: \$193,000 1993-1994: \$211,808 1992-1993: \$75,000 1991-1992: \$123,300 1990-1991: \$111,950 1989-1990: \$57,000 1988-1989: \$75,950 1987-1988: \$76,152 1986-1987: \$18,400

Internal Support TotalBDC -2Tc 00 Tdt5(1992)Tj0 TTw 6.59 n

2023: \$10,000		
2022: \$10,000	2014: \$5,000	2006: \$7,000
2021: \$10,000	2013: \$9,797	2005: \$18,000
2020: \$7,000	2012: \$12,000	2004: \$43,000
2019: \$7,000	2011: \$20,500	2003: \$48,000
2018: \$7,000	2010: \$53,000	
2017: \$5,000	2009: \$33,000	
2016: \$5,000	2008: \$19,000	
2015: \$5,000	2007: \$25,000	

Genetic and population structure of mountain lions in Texas. Comparison of historic and contemporary genetic variability of mountain lions. Estimate the effective population size of mountain lions in western and southern Texas.

#### Jaguarundi

Home range, habitat use, and activity patterns of jaguarundi in Mexico. Genetic variability and population structure of jaguarundi in Mexico. Sedation techniques and protocols of free-ranging jaguarundi.

## Thailand and Taiwan Cats

Leopard cat ecology in Thailand. Leopard cat survival rates in Southeast Asia. Comparative ecology of clouded leopard, Asiatic golden cat, and marbled cat in Thailand. Development of sedation protocols for 4 species of Thailand cats. Home range overlap of binturong, yellow-throated marten, and dhole with Thai cats. Genetic variability and potential inbreeding of 3 rare felids in Thailand. Photo capture, habitat use, and activity patterns of 4 species of civet cats in Taiwan.

## Leopard

Country-level population estimate for leopards in Botswana, Southern Africa

#### Jungle Cat

Occupancy of jungle cats in the Hula Valley and Jordan River Corridor of northern Israel

## Service

Outreach and Education

## **Popular Presentations**

Popular presentations to technical and non-technical audiences: 189 (through 2013) (Details of the popular presentations can be provided upon request)

2013-8	2007-5	2001-10	1995-3	1989-14
2012-11	2006-7	2000-5	1994-7	1988-8
2011-9	2005-11	1999-3	1993-7	1987-7
2010-15	2004-4	1998-NA	1992-7	
2009-7	2003-0	1997-2	1991-8	
2008-13	2002-6	1996-NA	1990-12	

## **Popular Articles**

Popular articles (35) to semi-technical and lay audiences. (through 2011)

Consultantships on Endangered Cats

Provided affidavit, deposition, and expert court testimony in litigation involving a bobcat harvest dispute between the Michigan Bear Hunters Association and the state of Michigan (Lansing, Michigan; Nov 2005)

Texas Railroad commission Hearing, Austin; on permit examination regarding controversial coal mine near Eagle Pass, Texas.

Affidavit, Law Firm in Washington, D.C.; intracoastal dredge dumping issue in coastal Texas. Federal Court Testimony, Pecos, Texas; trial involving international smuggling of wild cat skins. Consultantships Request for expert consultation on endangered ocelots occurred either by or for the following agencies:

Federal

U.S. Fish & Wildlife Service Office of Endangered Species Office of Scientific Authority Cooperative Wildlife Research Units Division of Ecological Services Department of Defense U.S. Army Corp of Engineers U.S. Bureau of Land Management U.S. Bureau of Reclamation U.S. Department of Agriculture U.S. Soil Conservation Service

#### State

Texas Parks and Wildlife Department Texas Department of Agriculture

#### Private

Private Environmental or Engineering Consulting Firms (M. Tewes served as subcontractor)Blanton and Associate (Austin)Naismith Engineering (Corpus Christi)Hicks and Company (Austin)Castillo Engineering (Kingsville)Horizon Company (Austin)Parsons Engineering (Houston)Mariah Company (Austin)Bechtel Engineering (San Francisco)Albert Halff Associates (Dallas)Michigan Bear Hunters AssociationInternational Society for Endangered CatsHigh Road, Inc.International Union for the Conservation of NatureNatural Resource

#### University Committees

Summary of Committee-Years (1 committee for 1 year) (updated Jan 2010): Number of "committee-years": 130 university level:33 college level:36 departmental:61

Division of Refuge System Division of Realty and Acquisition Division of Law Enforcement

Animal Damage Control Federal Aviation Administration International Boundary and Waters Commission

Texas Department of Highways Texas General Land Office University Level

Honorary Degree Committee (chair 2008-10, member 1993-94) Regents Professor Selection Committee (chair 2008, member 2009, 2010) Faculty Developmental Leave Committee (chair 2008-09, member 2007-08, 2009-10) President's Senior Faculty Advisory Committee (member 2008-09) Advisory Committee for Faculty Tenure Appeals (chair 2008) Selection Committee for Head Librarian (member 2007-08) University Promotion Committee (member 2002, 2005, 2006) Annual Faculty Lecture Committee, Member (2004-05) University Research Council (chair, 2002-04) Faculty Senate Grievance Committee (1995-97) Institutional Animal care and Use Committee (chair 1994-95, 1987-1995) Traffic Appeals Committee (member 1990-93)

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Manager and Coach, National Little League Baseball (T-ball) Coach, Girls Basketball, Boys and Girls Club, Kingsville (ages 11-12) Judged several elementary and middle school science fairs Presentations to several classes, school groups, scout groups.... Member, King High School Band Booster Club Member, Girl Scouts of America Committees Chair-Awards Committee Chair-Nominations Committee Chair-Program Committee Chair-Local Arrangements Committee Member-Future Directions Committee Member-Steering Committee Member-Endangered Species Act Committee Member-Animal Technical Committee Member-Communities Technical Committee Member-Animal Technical Committee Member-Animal Technical Committee Member-Communities Technical Committee

Media Coverage

*Television (28 different programs or segments)* 1997-2007

Texas Country Reporter (May 07)

South African film crew visited and developed piece for Nature Program in Africa (Feb 07) TV piece: Channel 10 (CBS) in Corpus Christi about CKWRI 25<sup>th</sup> Anniv. (Moore tape) (2006) TV Interview: Channel 3 (ABC) in Corpus Christi regarding Dr. Drawe Tribute (Calallen) (06) TV Interview: Channel 10 (CBS) in Corpus Christi regarding Dr. Drawe Tribute (Calallen) (06) Corpus Christi station Rio Grande Valley station

*Magazine articles (by external authors)* Smithsonian. Not a lot of ocelots. (June 2002) Audubon. The ghost cat's ninth life. (July-August, 2000) (p. 71-77) Texas Parks and Wildlife Magazine. Rare beauty of the thornshrub. (2000) (p. 15) National Wildlife Magazine. Cat on the spot. (June/July, 1994) (32:34-37) Sports Afield. The wild cats of North America. (July, 1993) Discovery Magazine. Land of five cats. (fall, 1993) National Geographic. Photo with caption about M. Tewes and Texas A&I Univ. (June, 1985) National Wildlife Magazine. (ca. 1983) Texas Monthly Magazine. Phantom cat of the Valley. (June, 1983) Audubon. Creatures Column- endangered small wild cats. (May, 1983) Southern Living Garbage Recycling Magazine Defenders of Wildlife *Ranger Rick* (children's wildlife magazine) 

John Hillis Young, Jr. 1992. Development of techniques to establish thorn shrub seedlings for restoration of ocelot habitat. (M.S., Aug. 1992)

Jon Michael Keener. 1990. Focal attraction of nongame birds in the Rio Grande Valley. (M.S., Dec. 1990)