

KIMBERLY TERRELL

EDUCATION

University of New Orleans, 2011
Ph.D., Conservation Biology

Tulane University, 2005
B.A., Political Science
B.S., Cell & Molecular Biology

AFFILIATIONS & MEMBERSHIPS

Adjunct Professor
2018 – Present
Louisiana State University,
School of Renewable Natural
Resources; Baton Rouge, LA

Adjunct Professor
2015 – Present
University of Memphis, Biology
Department; Memphis, TN

Research Associate
2013 – 2018
Smithsonian Conservation
Biology Institute; Washington,
DC & Front Royal, VA

Member, National Association
for the Advancement of Colored
People

Lifetime Member, Society for
Conservation Biology

Lifetime Member, Society for the
Study of Amphibians and
Reptiles

GRANTS, CONTRACTS & AWARDS

2018 Smithsonian Institution
contract for biodiversity surveys,
\$25,000 *declined*

2018 NFWF subcontract for
environmental sampling, \$10,000

2016 USFWS Wildlife Health
Grant, \$15,700

BIOSKETCH

Dr. Kimberly Terrell is the Director of Community Outreach at Tulane University's Environmental Law Clinic and maintains academic affiliations with the School of Renewable Natural Resources at Louisiana State University and the Department of Biology at the University of Memphis. Prior to joining Tulane, Dr. Terrell worked as a conservation biologist, studying the effects of environmental change on native U.S. wildlife. She has >10 years of experience in conservation research, community outreach, project management, and grant-writing. In her current position, Dr. Terrell works to help concerned citizens gain access to legal resources and have a voice in the environmental decisions that affect their communities.

POSITIONS HELD

Director of Community Outreach (Oct 2018 – present)
Tulane University's Environmental Law Clinic; New Orleans, LA
Manage relationships between clients, potential clients, and clinic staff. Develop training materials, research environmental issues, help determine client needs and develop strategies. Manage collaborative projects, facilitate media relations, and secure grant funding. Supervise students, interns, and volunteers.

Independent Contract Biologist (Dec 2017 – Oct 2018)
New Orleans, LA
Designed and conducted scientifically-rigorous studies to benefit wildlife conservation and natural resource management in southeast Louisiana. Promote STEM education and conservation outreach. Provide technical advice to natural resource managers about habitat conservation issues.

Director of Research and Conservation (Aug 2015 – Nov 2017)
Memphis Zoo; Memphis, TN
Led research projects focused on wildlife conservation in zoos and in nature. Supervised 5 full-time staff and managed an annual budget of \$1.5 million. Managed internal grants program, including reviewing proposals and evaluating projects. Provided technical advice to senior management on ecological restoration and habitat conservation issues.

Independent Contract Biologist (Oct 2013 – July 2015)
New Orleans, LA
Designed and conducted research to establish species inventories of amphibians and reptiles in southeast Louisiana National Wildlife Refuges (Bayou Sauvage, Big Branch Marsh, and Bogue Chitto) for US Fish and Wildlife Service (USFWS). Trained and supervised field staff, analyzed data, conducted STEM outreach, and prepared reports.

David H. Smith Post-Doctoral Research Fellow (Sep 2011 – Oct 2013)
Smithsonian Conservation Biology Institute (Washington, DC)
Designed and conducted research to understand the effects of climate change on amphibian physiology and disease susceptibility. Engaged local communities in amphibian conservation and science education.

GRANTS, CONTRACTS & AWARDS

2016 US Forest Service grant for wildlife conservation, \$272,000

2015 USFWS contract for native wildlife surveys, \$60,000

2014 Maryland DNR contract for wildlife disease research, \$14,000

2014 NAFWA RCN Grant for environmental research, \$100,000

2013 Virginia State Wildlife Grant for research, \$60,000

2011 – 2013, David H. Smith Conservation Research Fellowship, \$170,000

2012 Friends of the National Zoo Ambassador Grant, \$45,000

2012 Virginia State Wildlife Grant for education, \$18,000

2010 – 2011, Smithsonian Predoctoral Fellowship, \$28,450

2007 – 2010, National Science Foundation Graduate Research Fellowship, \$121,500

2005, Tulane Environmental Stewardship Award

ADDITIONAL TRAINING & CERTIFICATIONS

Advanced SCUBA, Dive Rescue and NITROX, American Academy of Underwater Sciences

Beginner and Intermediate ArcGIS, July 2013 and 2014

Advanced Statistical Analyses in R Workshop, May 2013

Popular Writing for Conservation Workshop, Jan 2013

Media Communications and Policy Workshop, Jan 2012

Conservation Business and Leadership, Aug 2011 & 2012

POSITIONS HELD (*continued*)

Smithsonian Pre-Doctoral Research Fellow (Sep 2010 – Aug 2011)

Smithsonian Conservation Biology Institute (Front Royal, VA)

Designed and conducted research related to physiology of endangered felid species. Conducted science education and conservation outreach. Secured research funding, engaged media to promote conservation.

NSF Graduate Research Fellow (Aug 2007 – Aug 2010)

University of New Orleans/Smithsonian Conservation Biology Institute

Designed and conducted research related to physiology of endangered felid species. Conducted science education and conservation outreach.

Teaching Assistant (Aug 2006 – July 2007)

University of New Orleans

Conducted research and taught introductory biology laboratory courses.

SELECTED RESEARCH EXPERIENCE

July 2016 – 2018

Orleans Parish, LA

Identifying Causes of Wildlife Die-Offs in Bayou Sauvage NWR

Conducting collaborative, field and lab-based physiological research to elucidate the causes of ongoing snake mortality in the refuge.

Research includes GIS mapping, environmental exposures, GC-MS sediment analysis, water quality monitoring, and biological sampling.

Aug 2013 – 2018

Northeastern U.S. (NY, PA, MD, VA, WV)

Cataloging Freshwater Biodiversity from Environmental DNA

Coordinating a 5-state project to map the distribution of *Cryptobranchus alleganiensis* salamanders through eDNA surveys, in partnership with state wildlife agencies, universities, non-profits, and citizen science groups.

Jan 2015 – Apr 2016

Southeastern Louisiana

Inventorying Louisiana's Amphibian and Reptile Communities

Designed and coordinated broad-scale surveys of herpetological communities in the southeast Louisiana National Wildlife Refuge system, in partnership with Daniel Breaux and Shelley Stiaes (USFWS). Established the first comprehensive amphibian and reptile species inventories for southeast LA refuges.

Feb 2013 – Mar 2016

National Zoo (DC)

Investigating Chytridiomycosis in Frogs and Salamanders

Investigated immune function in lowland leopard frogs (*Lithobates yavapaiensis*) experimentally infected with *Batrachochytrium dendrobatidis* (*Bd*). Surveyed for *Bd* and *B. salamandrorans* in *C. a. alleganiensis*.

Oct 2013 – June 2014

Mid-Atlantic U.S.

Distribution and Prevalence of Ranavirus in Wood Frogs

Partnered with MD, VA, NJ, DE, and PA wildlife agencies to investigate the prevalence and impacts of ranavirus in (*L. sylvatica*) through population monitoring and biological sampling.

MEDIA PRESENCE

Darling, E., **K.A. Terrell**, E. Bayraktarov. "Imperiled Treasure: A Coral Reef Called Varadero". 6 Oct 2017
news.mongabay.com

Calatayud, N. and **K.A. Terrell**. "In Search of an Iconic Salamander". 24 Aug 2017
sandiegozoo.org/science-blog

Main, D. "Effect of Fracking is Basically Unknown". 1 Aug 2014
Popular Science

Landau, Lauren. "Searching for Salamanders in Appalachia." *WAMU 88.5* 25 April 2014.

Lee, Jane. "U.S. Giant Salamanders Are Slipping Away: Inside the Fight to Save the Hellbender." *National Geographic* (film interview), 19 Dec 2013.

Jacobson, Rebecca. "Rustling River Monsters for Science." *PBS NewsHour* 7 Aug 2013.

Springston, Rex. "Salamanders' Disappearance Raises Pollution Concerns." *Richmond Times-Dispatch* 17 Jun 2013.

PROFESSIONAL SERVICE

2015 – 2018 *Ad hoc* reviewer for:

- EcoHealth
- Scientific Reports
- Conservation Physiology
- Theriogenology
- PLoS One
- Journal of Integrative & Comparative Biology
- Journal of Herpetology

2013-2018 David H. Smith
Postdoctoral Fellowship
Application reviewer

2016-2017 Society for
Conservation Biology meeting
abstract reviewer

SELECTED PUBLICATIONS

Terrell, K.A., et al. Multi-Source Contamination and Unusual Wildlife Mortality in a Federally-Protected Urban Refuge. *Ecol Evol. In Review*.

Weber, B., K.E. Bowers, **K.A. Terrell**, et al. Pre- and post-natal effects of maternal corticosterone on growth, stress reactivity, and survival of nestling house wrens. *Funct Ecol. In Press*.

Terrell, K.A. To Nature, With Love: Sending Mississippi Gopher Frogs Back to the Wild. *Exxooberance*, Memphis Zoo, Jul/Aug 2017

Savage, A., **K.A. Terrell**, et al. Reduced immune function predicts disease susceptibility in frogs infected with a deadly fungal pathogen. *Cons Phys* 2016; doi: 10.1093/conphys/cow011.

Augustine, L., **K.A. Terrell**, et al. Nutritional analysis of hellbender, *Cryptobranchus alleganiensis*, diets in captivity and in the wild. *Herp Review* 2016; 47: 63-69.

Bales, E.K., O.J. Hyman, et al., and **K.A. Terrell**. Pathogenic chytrid fungus *Batrachochytrium dendrobatidis*, but not *B. salamandrivorans*, detected on eastern hellbender salamanders. *PLoS One*. 2015; 10:e0116405.

Souther, S., M.W. Tingley, D.T.S. Hayman, V.D. Popescu, M.E. Ryan, T.A. Graves, B. Hartl, and **K.A. Terrell**. Biotic impacts of shale development: research priorities and knowledge gaps. *Front. Ecol. Env.* 2014; 12: 330-338.

Aslan, C., M. Pinsky, M. Ryan, S. Souther and **K.A. Terrell**. Cultivating Creativity in Conservation Science. *Conservation Biology* 2014; 28: 345-353.

SELECTED EDUCATION AND OUTREACH

Oct 2007 – Mar 2018
Lafayette Parish Schools (LA)
Gaining Early Awareness & Readiness for Undergraduate Programs
Conducted hands-on science classes with ~2,500 students from underperforming schools serving low-income communities.

Feb 2017 & Sep 2017
Memphis, TN
Taste of Science™ Memphis
Invited guest speaker for this public event aimed at promoting science literacy among adults.

Feb 2017
Shelby County Schools (Memphis, TN)
District Learning Day
Developed and presented a curriculum focused on climate change science and incorporating NGS Standards for 30 educators.

May 2015
De La Salle High School (New Orleans, LA)
Exploring Native Amphibian and Reptile Diversity
Gave a guest lecture about local biodiversity to AP Biology Students and organized a follow-up field trip to Big Branch Marsh.