

# KIMBERLY TERRELL

## EDUCATION

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

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

## SOCIAL MEDIA PRESENCE

Science blog:  
[www.SalamanderScience.com](http://www.SalamanderScience.com)

Twitter:  
[@SnotOtters](https://twitter.com/SnotOtters)

Facebook:  
Appalachian Salamander page

## MEDIA INTERVIEWS

Landau, Lauren. "Searching for Salamanders in Appalachia." *WAMU 88.5 Metro Connection*, 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.

May, Valerie. "River of Life." *Zoogoer* Sep-Oct 2013.

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

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

Moore, Molly. "On the Fringe of Life: A Tour of Appalachia's Biodiverse Frontier." *The Appalachian Voice* Feb-Mar 2013.

Renick-Mayer, Lindsay. "Salamander Secrets." *Zoogoer* May-June 2012.

## BIOSKETCH

Dr. Kimberly Terrell is a wildlife ecologist and Adjunct Faculty in Tulane's Department of Ecology and Evolutionary Biology (New Orleans, LA). She has a formal research affiliation with the Smithsonian Conservation Biology Institute (Washington, DC), where she completed her Ph.D. and postdoctoral studies. Kim's postdoctoral work was supported by the David H. Smith Conservation Research Fellowship. She remains involved in this unique program, which trains emerging leaders in ecological conservation. With projects in Louisiana and Appalachia, Kim's current research focuses on amphibians in swamp and mountain ecosystems. She is particularly interested in questions related to disease, climate change, and species monitoring. As evidenced by her teaching record, Kim maintains a strong commitment to science education, particularly in disadvantaged urban communities.

## SELECTED RESEARCH EXPERIENCE

Mar 2014 – present Southeast Louisiana  
Monitoring Louisiana's Amphibian and Reptile Communities

Working with Daniel Breau (USFWS) and Cori Richards-Zawacki (Tulane University) to evaluate herpetological communities in the Bayou Sauvage, Big Branch and Bogue Chitto NWR system.

Aug 2013 – present Northern Appalachia  
Cataloging Freshwater Biodiversity from Environmental DNA

Coordinating a 5-state project to map the distribution of the hellbender salamander (*C. alleganiensis*) through eDNA surveys.

June 2013 – present Nottoway River and New River, VA  
SCUBA Surveys for Endangered Mussels and Rare Salamanders

Conducted SCUBA dive transect surveys for hellbenders and collected freshwater mussels for captive propagation and release.

Oct 2013 – June 2014 Mid-Atlantic U.S.  
Distribution and Prevalence of Ranavirus in Wood Frogs

Partnering with wildlife agencies from 5 states to investigate the prevalence and impacts of ranavirus in wood frogs (*L. sylvatica*).

Jan 2013 – May 2014 National Zoo (DC)  
Consequences of Chytrid Infection in Lowland Leopard Frogs

Collaborating with Dr. Anna Savage (National Zoo) to investigate immune responses to chytrid infection in *Lithobates yavapaiensis*.

Jun 2011 – May 2014 National Zoo (DC) & southwest Virginia  
Impacts of Climate Change on Salamander Health

Combining lab and field research to understand the physiological impacts of climate change in hellbender salamanders.

## GRANTS & AWARDS

2014 Contract to conduct herpetological surveys in southeast LA, USFWS, \$60,000

2014 Ranavirus subcontract from Maryland DNR, \$14,000

2014 NAFWA Regional Conservation Needs Grant, \$100,000

2013 Virginia State Wildlife Grant, \$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, \$18,000

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

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

2007 - 2008, Co-Investigator, LSU-ACRES collaborative research grant, \$62,250

2005, Tulane University Environmental Stewardship Award

## CERTIFICATIONS & ADDITIONAL TRAINING

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

Introduction to Open Source GIS, July 2013

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

## SELECTED PUBLICATIONS

Bales, E.K., O.J. Hyman, A.H. Loudon, R.N. Harris, G. Lipps, E. Chapman, K. Roblee, J.D. Kleopfer, and **K.A. Terrell**. Pathogenic chytrid fungus *Batrachochytrium dendrobatidis*, but not *B. salamandrivorans*, detected on eastern hellbender salamanders. *PLoS One*. *In Press*.

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.

**Terrell, K.A.**, S. Souther, and M.W. Tingley. Without full disclosure of accidents and chemicals used, fracking risks remain unknown. *The Conversation* ([www.theconversation.com](http://www.theconversation.com)). 1 Aug 2014.

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

**Terrell, K.A.** The Snot Otter: A 160 million-year-old national treasure. *Our Planet Global Conversations Blog*. United States Department of State. 3 Jan 2014. <http://ourplanet.infocentral.state.gov/2014/01/03/the-snot-otter/>

**Terrell, K.A.**, R.P. Quintero, S. Murray, J. Murphy, B. Nissen, M. Evans, J.D. Kleopfer, and B. Gratwicke. Cryptic impacts of variable temperatures on amphibian immune function. *J. Exp. Bio.* 2013; 214: 4204-4211.

Souther, S., **K.A. Terrell**, M.W. Tingley, D.T.S. Hayman, V.D. Popescu, and B. Hartl. Society for Conservation Biology position statement on shale development. <http://www.conbio.org/policy/scb-requests-additional-research-on-the-impacts-of-fracking-on-biodiversity>

**Terrell, K.A.**, D.E. Wildt, N.M. Anthony, B.D. Bavister, S.P. Leibo, L. Penfold, L.L. Marker and A.E. Crosier. Different patterns of metabolic cryo-damage in domestic cat (*Felis catus*) and cheetah (*Acinonyx jubatus*) spermatozoa. *Cryobiology* 2012; 64: 110-117.

**Terrell, K.A.**, D.E. Wildt, N.M. Anthony, B.D. Bavister, S.P. Leibo, L. Penfold, L.L. Marker and A.E. Crosier. Evidence for limited glucose uptake and compromised sperm metabolic function in the teratospermic domestic cat (*Felis catus*) and cheetah (*Acinonyx jubatus*). *Biol. Reprod.* 2010; 83: 833-841.

**Terrell, K.A.**, T.A. Rasmussen, C. Trygg, B.A. Bunnell and W.R. Buck. Molecular beacon genotyping for globoid cell leukodystrophy from hair roots in the twitcher mouse and rhesus macaque. *J. Neurosci. Meth.* 2007; 163: 60-66.

MEMBERSHIPS AND  
PROFESSIONAL  
AFFILIATIONS

Society for Conservation Biology,  
*Life Member*

Ducks Unlimited, Member,  
2013 - present

The Wilderness Society, Member,  
2012 - present

American Association of  
Underwater Sciences, 2011 –  
present

Virginia Herpetological Society,  
Member, 2010 - present

Gulf Restoration Network,  
Member, 2008 - present

Association for Women in  
Science, Member,  
2010 – 2011

PROFESSIONAL SERVICE

*Ad hoc* reviewer:

Theriogenology  
PLoS One

Journal of Integrative &  
Comparative Biology

Journal of Herpetology

2015, 2014, & 2013 David H.  
Smith Postdoctoral Fellowship  
Application reviewer

Abstract reviewer for the 2014  
North American Congress on  
Conservation Biology

Reviewed student abstracts for  
the 2013 Annual Meeting of the  
Society for Conservation Biology

SELECTED EDUCATION AND OUTREACH

July 2014 – present Southwest VA

Hellbender eDNA Citizen Science Program

Partnering with Dr. David Mellor (VA Tech) to engage Master  
Naturalists in eDNA research through an NSF education grant.

May 2014 Great Smoky Mountain National Park, TN

Biodiversity Workshop for Urban Youth

Designed and led an outreach event to connect underprivileged  
students from Knoxville, TN with the natural world, in partnership  
with the David H. Smith Fellows.

Mar 2014 Reston, VA

NWF National Wildlife Week Program

Instructed a webinar about hellbender biology for ~50  
educators through the National Wildlife Federation.

Oct 2012 & 2013 National Zoo, Washington, DC

Haunted Salamander Lab

Designed, organized, and led a haunted science lab during  
Smithsonian's annual Boo at the Zoo. Taught ~600 adults and  
children about amphibian ecology during this 3-night event.

Oct 2013 Glade Spring, VA

Farm Field Day

Led an education booth on local amphibians and reptiles for this  
event held by the Holston Soil and Water Conservation District.

Apr 2013 National Zoo, Washington, DC

Adult Certification Program in Wildlife Studies

Taught a course focused on amphibian biology for this program.

July 2013 and June 2012 Marion, VA and Lafayette, LA

Watershed Science Workshops

Co-instructed separate watershed science workshops for middle school  
teachers from southern Virginia and Lafayette, LA.

Dec 2012 National Zoo, Washington, DC

Discovery Education™ Amphibian Science Webinar

Co-instructed in this webinar broadcasted to ~30,000 students.

Oct 2009 – 2015 Lafayette, LA

Smithsonian Scholars in Schools Program

Designed and taught hands-on science courses for >1,300  
students (to date) from low-performing schools in Lafayette.

Apr 2006 – Sep 2014 Various Locations in LA and VA

Invited Lectures and Classroom Visits

Gave ecology-related lectures to students from ~20 different  
schools, including K-12, undergraduate and graduate students.