

# **KRISTEN K. CECALA**

Phone: 302-354-2296

E-mail: [Krcecala@davidson.edu](mailto:Krcecala@ davidson.edu)

Davidson College  
Department of Biology  
Davidson, NC 28035-7118

Permanent Address:  
P.O. Box 55  
Montchanin, DE 19710

## **EDUCATION**

2007. B.S. Biology – Davidson College, Davidson, NC.

2005. Victoria University of Wellington, New Zealand. Certificate of Proficiency.

2003. Tower Hill School, Wilmington, DE. (4 year recipient of High Honors).

## **RESEARCH INTERESTS**

- Inter-specific interactions of animal populations
- Stream ecology
- Landscape ecology
- Conservation biology
- Herpetology

## **POSITIONS**

May 2007 – Aug. 2007. United States Geological Survey Northeast Amphibian Research and Monitoring Initiative Technician. Dr. Larissa Bailey at USGS Patuxent Wildlife Research Center.

Aug. 2006 – Present. National Science Foundation Research Experience for Undergraduates Fellowship with Dr. Michael Dorcas at Davidson College.

Jan. 2006 – Aug. 2006. Technician for Davidson College Herpetology Laboratory with Dr. Michael Dorcas.

Jan. 2005 – May 2005. National Science Foundation Research Experience for Undergraduates Fellow with Dr. Michael Dorcas at Davidson College.

Jan. 2004 – Present. Volunteer Animal Care Assistant. Davidson College Animal Care Facility.

May 2004 – Aug. 2004; Nov. 2005 – Feb. 2006. Dover Saddlery. Product Advisor.

May 2002 – Aug. 2002. Gateway Stables. Lead instructor for ages 4-8.

## **PUBLICATIONS**

Cecala, K.K., S.J. Price, and M.E. Dorcas. 2007. A comparison of MS-222 (Tricaine Methane Sulfonate) and Orajel<sup>®</sup> as amphibian anesthesia. *Herpetological Review* 38:63-66.

Cecala, K.K., S.J. Price, and M.E. Dorcas. *In press*. The diet of larval red salamanders (*Pseudotriton ruber*) examined using a non-lethal technique. *Journal of Herpetology*

Cecala, K.K., S.J. Price, and M.E. Dorcas. *In review*. Red Salamander (*Pseudotriton ruber*). Polymelia. *Herpetological Review*.

Westfall, C., K.K. Cecala, S.J. Price, and M.E. Dorcas. *In review*. The ecology of mite parasitism in salamanders of the Western Piedmont of North Carolina. *Journal of Parasitology*.

### **ONLINE RESOURCES**

Cecala, K.K. and M.S. Kirlin. Education Presentations – Amphibians and Reptiles: an Introduction to Herpetofauna. Davidson College Herpetology Laboratory Outreach Program.  
([www.bio.davidson.edu/people/midorcas/outreach/Education%20presentations.html](http://www.bio.davidson.edu/people/midorcas/outreach/Education%20presentations.html))

### **SCIENTIFIC PRESENTATIONS**

Cecala, K.K., S.J. Price, and M.E. Dorcas. Interspecific interactions among stream salamanders: Integrating laboratory and field studies. Association of Southeastern Biologists. Columbia, SC. April 2007.

Cecala, K.K., S.J. Price, and M.E. Dorcas. Seasonal activity and movement of larval Red Salamanders (*Pseudotriton ruber*). Association of Southeastern Biologists. Columbia, SC. April 2007.

Westfall, M.C., K.K. Cecala, S.J. Price, and M.E. Dorcas. Patterns of Trombiculid mite (*Hannemania* sp.) parasitism among Plethodontid salamanders in the western Piedmont of North Carolina. Association of Southeastern Biologists. Columbia, SC. April 2007.

Cecala, K.K. and M.E. Dorcas. Effective sampling techniques for amphibians and reptiles. Virginia Herpetological Society Symposium. Farmville, VA. October 2006.

Cecala, K.K., S.J. Price, and M.E. Dorcas. A comparison of MS-222 (Tricaine Methane Sulfonate) and Orajel<sup>®</sup> as amphibian anesthesia. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA. July 2006.

Cecala, K.K., S.J. Price, and M.E. Dorcas. The effects of urbanization on stream salamanders: Initiation of a landscape-level experiment. Davidson College Science Symposium. Davidson, NC. May 2006.

Cecala, K.K., S.J. Price, and M.E. Dorcas. The effects of urbanization on stream salamanders: Initiation of a landscape-level experiment. Annual Meeting of the Association of Southeastern Biologists. Gatlinburg, TN. March, 2006.

Cecala, K.K., S.J. Price, and M.E. Dorcas. The effects of urbanization on stream salamanders: Initiation of a landscape-level experiment. Davidson College Science Symposium. Davidson, NC. May 2005.

### **GRANTS AND AWARDS**

2007- Present. **National Science Foundation Graduate Research Fellowship.**

2007. **Tom Daggy Biology Award** for outstanding academic achievement, leadership, service, and a love of learning, Davidson College.

2007. **Derieux Award.** North Carolina Academy of Science.

2007. **VPAA Travel and Presentation Grant.** \$300.

2006. **Sigma Xi Grant-in-Aid-of-Research.** Sigma Xi. "Eating your neighbor: The role of predation in structuring stream salamander guilds". \$700.

2006. **Yarbrough Grant,** Collegiate Academy, North Carolina Academy of Science. "Eating your neighbor: The role of predation in structuring stream salamander guilds". \$500.

2006. **Davidson College Summer Student Housing Award.** \$350.

2006. **Davidson College Department of Biology.** "Eating your neighbor: The role of predation in structuring stream salamander guilds". \$200.

2006. **Davidson College Department of Biology.** "A comparison of MS-222 (Tricaine Methane Sulfonate) and Orajel<sup>®</sup> as amphibian anesthesia". \$100.

2006. **David C. Grant Travel Award.** \$85

2006. **VPAA Travel and Presentation Grant.** \$250

### **CURRENT PROJECTS**

Cecala, K.K., S.J. Price, and M.E. Dorcas. Indirect mediation of stream salamander abundances by intraguild predators.

Cecala, K.K., S.J. Price, and M.E. Dorcas. Differences in stream movements of larval red salamander age cohorts.

Cecala, K.K., S.J. Price, and M.E. Dorcas. Demography of a larval stream salamander guild.

Cecala, K.K., S.J. Price, and M.E. Dorcas. Growth rates and seasonal activity of larval stream salamanders.

Cecala, K.K., M.E. Dorcas, and J.W. Gibbons. The ecological effects of limb loss in *Malaclemys terrapin*.

Cecala, K.K., S.J. Price, and M.E. Dorcas. The ecology of juvenile *Nerodia sipedon* within first order streams.

## **RESEARCH EXPERIENCE**

August 2006 – Current. Research Experience for Undergraduates with Dr. Michael Dorcas. Responsibilities include database management, website development, animal care, coordinating herpetological surveys of the Davidson College Ecological Preserve, examining patterns of injury in *Malaclemys terrapin*, and conducting research on stream salamander movements and the effects of urbanization on stream salamanders.

May 2006 – August 2006. Technician for Davidson College Herpetology Laboratory with Dr. Michael Dorcas. Responsibilities included database management, animal care, and conducting research on movements of stream salamanders.

January 2006 – May 2006. Technician for Davidson College Herpetology Laboratory with Dr. Michael Dorcas. Responsibilities included website development, database management, organizing, and assisting with stream salamander research (sampling and processing animals).

January 2005 – May 2005. Research Experience for Undergraduates with Dr. Michael Dorcas. Responsibilities included coordinating herpetological surveys on the Davidson College Ecological Preserve, database management, and organizing and assisting with stream salamander research (sampling and processing animals).

## **PROFESSIONAL ORGANIZATIONS**

American Society of Ichthyologists and Herpetologists  
Association of Southeastern Biologists  
North Carolina Academy of Science  
Partners in Amphibian and Reptile Conservation  
Southeastern American Society of Ichthyologists and Herpetologists  
Society for the Study of Amphibians and Reptiles

## **REVIEWER**

Biological Conservation  
New Zealand Journal of Zoology  
Journal of the North Carolina Academy of Science

## **SKILLS**

Amphibian Processing (visual implant elastomer and visual alpha tags)  
ArcGIS/ArcView (and Animal Movement Extension, Hawth's Tools, and ArcHydro)  
Calling Surveys

Database Management (Microsoft Access and Excel)  
Experimental Design and Data Analysis (Minitab, JMP)  
Field Collection Techniques (e.g. drift fence, aquatic trapping, coverboards)  
MARK  
Preserving museum specimens  
Radiotelemetry  
Snake Processing (Pit-tagging and Branding)  
Turtle Processing (Emydids, Chelydridae, Kinosternidae, Trionychidae)  
Website-Based Data Management  
Web site development

### **RELEVANT CLASSES**

Amphibian and Reptile Conservation  
Animal Behavior and Ecology  
Animal Physiology  
Biostatistics  
Calculus  
Ethics  
Evolution  
General Chemistry  
Genetics  
Genomics  
Herpetological Investigations  
Independent Study (2x) with Dr. Michael Dorcas  
    Examining intraguild predation in local stream salamander communities  
    Examining the movements and population characteristics of a local stream  
        salamander guild  
Investigations into the use of Geographical Information Systems  
    Examining how the proximity and extent of watershed disturbance effects streams  
        within the first two years of urbanization  
Microbiology  
Physics with Calculus  
Vertebrate Field Zoology