# **CATHERINE F. FROCK**

Department of Wildlife Ecology and Conservation

University of Florida

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## **RESEARCH INTERESTS**

behavioral landscape ecology, conservation biology, movement ecology, animal personalities, climate change, interspecies interactions, montane and forest ecosystems, human impacts on wildlife, habitat connectivity

### **EDUCATION**

2016-present University of Florida (UF) – Gainesville, FL

**Ph.D. in Wildlife Ecology and Conservation** (*in progress*) Co-Advisers: Dr. Robert McCleery and Dr. Mike Conner

Dissertation: An integrative study in the behavioral landscape ecology of Sherman's fox

squirrels: implications for animal conservation in a changing world

2013–2015 University of Wisconsin-Madison (UW-Madison) – Madison, WI

M.S. in Zoology

Adviser: Dr. Monica Turner

<u>Thesis</u>: Microhabitat conditions rather than landscape patterns affect post-dispersal seed removal in burned and unburned lodgepole pine (*Pinus contorta* var. *latifolia*) forests

2005-2009 North Carolina State University (NCSU) – Raleigh, NC

**B.S. in Biological Sciences, graduated summa cum laude** Concentration: Ecology, Evolution, and Conservation Biology

Adviser: Dr. Nick Haddad

Honors thesis: The effects of human landscape modification on amphibian movement and

habitat choice

#### **PUBLICATIONS**

**Frock, C.F.** and M.G. Turner. Microhabitat rather than landscape pattern affects post-dispersal seed removal by rodents in burned and unburned lodgepole pine forests. In review at *Landscape Ecology*.

Braun de Torrez, E.C., **C.F. Frock**, W.W. Boone IV, A.R. Sovie, R.A. McCleery. Seasick: Why value ecosystems severely threatened by climate change? In review at *Biological Conservation*.

Sovie, A.R., Greene, D.A., **Frock, C.F.**, Potash, A.D., and R.A. McCleery. Ephemeral temporal partitioning may facilitate coexistence in competing species. In preparation for *Animal Behaviour*.

# RESEARCH-RELATED GRANTS AND AWARDS

2018	UF Graduate Student Council Travel Grant	\$350
2018	UF Wildlife Ecology and Conservation (WEC) Department Travel Award	\$250
2013-2018	NSF Graduate Research Fellowship Program	~\$132,000
2016	UF WEC Department Travel Award	\$250
2016	UF Institute of Food and Agricultural Sciences Travel Award	\$250
2015	UW-Madison John Jefferson Davis Travel Award*	\$600
2015	U.S. Agency for International Development Research and Innovation Fellowship*	\$11,500
2015	NSF Graduate Research Opportunities Worldwide Award*	\$5,000

2014	UW-Madison Department of Zoology Graduate Student Summer Research Award	\$2,500
2009	NSF Research Experience for Undergraduates at the University of Alaska Southeast	\$4,950
2007-2009	Howard Hughes Research Scholars Program at NCSU	\$14,620
2008	Phi Kappa Phi Study Abroad Scholarship	\$1,000
2008	NCSU Study Abroad Office Scholarship	\$1,750

#### TEACHING AND MENTORING EXPERIENCE

Jan.-Apr. 2018 Teaching Assistant: Wildlife Techniques (WIS 4945), WEC, UF – Gainesville, FL

Aug.-Dec. 2015 Lab Instructor, Introductory Biology (BIO 152), Zoology Department, UW-Madison

Jul. 2015 Co-Leader: Science Club, Adult Role Models in Science Program – Madison, WI

Apr. 16, 2015 Guest Instructor, UW-Preschool Laboratory – Madison, WI

Sep.-Dec. 2014 Mentor: 2 Introductory Biology (BIO 152) Independent Project students, UW-Madison

Jan.-Apr. 2011 Instructor, Mad Science of the Bay Area - Newark, CA - San Francisco Bay area

Jan.-May 2010 Teaching Assistant: Ecology, Evolution, and Behavior, NSCU Biology Department

#### TECHNICAL REPORTS AND MEMOS

**Frock, C**. and S. Euing. U.S. Fish and Wildlife Service. 2011. Lange's metalmark butterfly annual survey report. *Memo to the files*.

**Frock, C**. and S. Euing. U.S. Fish and Wildlife Service. 2011. Contra Costa wallflower annual survey report. *Memo to the files*.

**Frock, C**. and S. Euing. U.S. Fish and Wildlife Service. 2011. Antioch Dunes evening primrose annual survey report. *Memo to the files*.

Thurgate, N. Y., W. Fields, N. Haddad, and C. Frock. 2009. Status and ecology of the eastern tiger salamander and Carolina gopher frog on Fort Bragg, NC. *Final report to the Army. 33 pp.* 

**Frock, C.** 2009. The effects of human landscape modification on amphibian movement and habitat choice. *Howard Hughes Research Scholars Program thesis*. *12 pp*.

Thurgate, N. Y., W. Fields, N. Haddad, C. Frock, J. MacAllister, and M. Chesser. 2008. Status and ecology of the eastern tiger salamander and Carolina gopher frog on Fort Bragg, NC. *Final report to the Army. 30 pp.* 

### **MANUSCRIPT REVIEWS**

Urban Naturalist

#### PROFESSIONAL EXPERIENCE

May-Aug. 2013	Biological Science Technician (Wildlife) - Crew Leader	Sierra National Forest
	U.S. Forest Service – Oakhurst, CA	
Oct. 2012	Contractor: Bureau of Land Management University of California, Berkeley – Berkeley, CA	Panoche, CA and Coalinga, CA
Oct. 2012	Contractor: Naval Air Weapons Station China Lake TOSS Inc. – Ridgecrest CA	

AprSep. 2012	<b>Lab Assistant I</b> University of California, Berkeley – Berkeley, CA	Carrizo Plain National Monument
JanMar. 2012	Wildlife Management Intern U.S. Fish and Wildlife Service – Fremont, CA	The Farallon Islands
Apr. 2011- Jan. 2012	Field Biology Intern U.S. Fish and Wildlife Service – Fremont, CA	San Francisco Bay area
Oct. 2010- May 2011	<b>Volunteer: Edgewood County Park and Natural Preser</b> Edgewood Weed Warriors - Redwood City, CA	ve
Nov. 2010- Mar. 2011	Volunteer/Fish Data Collection Intern Marine Science Institute – Redwood City, CA	San Francisco Bay area
May-Sep. 2010	<b>Biological Science Technician (Wildlife)</b> U.S. Forest Service – Camptonville, CA	Tahoe National Forest
Aug. 2007- May 2010	Research and Laboratory Technician NCSU Biology Department – Raleigh, NC	Fort Bragg military installation
May 2007, 2008, 2009; Mar. 2010	Field Technician NCSU Zoology Department - Raleigh, NC	Savannah River Site, SC
May-Aug. 2009	<b>Undergraduate Researcher: NSF REU Program</b> University of Alaska Southeast – Juneau, AK	Southeast Alaska
May-Aug. 2007, 2008	Field Technician in Conservation Biology NCSU Zoology Department - Raleigh, NC	Fort Bragg military installation
May-Jun. 2008	Study Abroad Program Participant NCSU Study Abroad Office – Raleigh, NC	Namibia

### PROFESSIONAL ORAL PRESENTATIONS (\* indicates presenter)

**Frock, C.F.\*** and M.G. Turner. Oct. 18, 2016. Microhabitat conditions rather than landscape patterns affect post-dispersal seed removal in burned and unburned lodgepole pine forests. The Wildlife Society's 23<sup>rd</sup> Annual Conference, Raleigh, NC. *20 minutes*.

Fields, W.R.\*, **Frock, C.,** Haddad, N.M., and N. Thurgate. Aug. 9, 2011. Testing assumptions about amphibian movement behavior with field experiments. 96<sup>th</sup> Annual Ecological Society of America Annual Meeting, Austin, TX.

**Frock, C.\*** Nov. 7, 2009. Movement studies of the impacts of human disturbance on amphibian habitat quality. 32<sup>nd</sup> Annual Fall Conference and General Meeting of the North Carolina Herpetological Society, Raleigh, NC. 20 minutes.

### **PROFESSIONAL POSTER PRESENTATIONS** (\* indicates presenter)

Hudgens, B.\*, N. Haddad, W. Fields, N.Y. Thurgate, **C. Frock**, D. Kuefler, B. Morris, and T. Jobe. Jul. 6, 2010. Using movement behaviors to assess dispersal routes in complex landscapes. 24<sup>th</sup> Annual International Congress for Conservation Biology, Edmonton, AB.

- **Frock, C.\*** Jul. 4, 2010. The effects of human landscape modification on the movement behavior of common and rare amphibian species. 24<sup>th</sup> Annual International Congress for Conservation Biology, Edmonton, AB.
- Hudgens, B.\*, N. Haddad, W. Fields, N. Y. Thurgate, C. Frock, D. Kuefler, T. Jobe. Dec. 1, 2009. Using movement behaviors to determine connectivity in complex landscapes. Partners in Environmental Technology Technical Symposium and Workshop, Washington, D.C.
- **Frock, C.\*** Apr. 1, 2008. How do wildfires affect the terrestrial movement behavior of amphibians? 17<sup>th</sup> Annual NC State University Undergraduate Research Symposium, Raleigh, NC.
- Cash, J.D.\*, **Frock, C.F.\***, Henry, A.B., Herbold, M.A., Maynard, B.P., Morgan, S.M., Sheikh, A.T., and S.L. Wray. Apr. 17, 2007. What about global warming? Learning experiences in topics related to global warming. 9th Annual NC State University & College of Agriculture and Life Sciences Undergraduate Teaching Symposium, Raleigh, NC.

### **OTHER ORAL PRESENTATIONS (\* indicates presenter)**

- **Frock, C.F.\***. Nov. 9, 2017. Behavioral landscape ecology of fox squirrels: implications for animal conservation in a changing world. Forest Ecology class (FOR 3153C) of ~30 undergraduates. *20 minutes. Invited speaker.*
- **Frock, C.F.\*** Dec. 17, 2015. A study in behavioral landscape ecology: Forests, fires, small mammals, and seeds. Master's defense talk, UW-Madison, Madison, WI. 20 minutes.
- **Frock, C.\*** May 7, 2015. Spatial variation in animal behavior: causes and effects. One of "12 Ecological Research Stories in 1 Hour" by Science Communication For Ecologists Seminar Graduate Students, Madison, WI. *5 minutes*.
- **Frock, C.\*** Mar. 13, 2014. Could granivory influence local plant recruitment patterns in a fire-dominated landscape? Student Association for Fire Ecology (UW-Madison chapter), Madison, WI. 5 *minutes*.
- **Frock, C.\*** Aug. 5, 2009. Distribution and infection patterns of the chytrid fungus affecting boreal toads of southeast Alaska. REU Student Research Seminar, Juneau, AK. 20 minutes.
- **Frock, C.\*** Mar. 20, 2009. The effects of habitat management on amphibian movement behavior. Howard Hughes Research Scholars Program Seminar, Raleigh, NC. *15 minutes*.
- **Frock, C.\*** Dec. 20, 2007. The effects of habitat management on salamander movement behavior. Howard Hughes Research Scholars Program Seminar, Raleigh, NC. *15 minutes*.

Jun. 13, 2018 Instructor, "Animal Foraging" 2-hour lesson, Wildwood Girl Scouts Camp – Wildwood, FL

### SELECTED SCIENCE COMMUNICATION AND OUTREACH EXPERIENCE

Jun. 2018- present	Member, Natural Resources Diversity Initiative, UF
Jan. 2014- Dec. 2015	Member, Biology Outreach Club, UW-Madison
Sep. 2014- May 2015	Outreach Committee Co-Chair, Zoology Graduate Student Organization, UW-Madison
Feb. 2, 2015	Interviewee, Jeremy Spool's "Chatting with Scientists" YouTube video series

Mar. 3, 2009	Speaker, "Studying abroad in Namibia", Valley Springs Middle School – Asheville, NC
Dec. 2007- May 2008	Graphic Designer and Newsletter Editor: <i>The Leaflet</i> , Wolfpack Environmental Student Association, NCSU
Aug. 2007- May 2008	Co-Founder, Secretary, Webmaster, Wolfpack Environmental Student Association, NCSU
Apr. 15, 2008	Invited Speaker, "Fire & fluorescent dye: how habitat management techniques affect amphibian movement behavior" 60-minute talk. Encore Program for Lifelong Enrichment.
SELECTED II	NIVERSITY ACTIVITIES AND SERVICE
Jan. 2016- present	Member, Wildlife Graduate Students Association, UF
Jul. 2016- Jun. 2018	Travel Grants Committee Chair, Wildlife Graduate Students Association, UF
Sep. 2013- Dec. 2015	Member, Wisconsin Ecology, UW-Madison
Feb. 2014- May 2015	Secretary, Student Association for Fire Ecology – UW-Madison chapter, UW-Madison
Dec. 2013- May 2014	Representative, Zoology Graduate Student Organization, UW-Madison
Sep. 30, 2013 & May 5, 2014	Workshop Leader, "NSF Application Overview and Panel", Graduate Student Professional Development, UW-Madison