## KELLY L. F. OTEN

948 Shining Wire Way Morrisville, NC 27560 919.282.7530 klfelder@ncsu.edu

#### **EDUCATION**

## Texas A&M University, College Station, TX

**August 2001 - August 2005** 

B.S. in Entomology, Major GPA 3.76

<u>Undergraduate project</u>: Forensic Entomology (Effect of preservative alcohol strength and type on survival of maggots collected from a carcass; Delayed insect succession on a body wrapped in a blanket and placed in the trunk of a car)

Project advisor: Dr. James Olson

# University of Tennessee, Knoxville, TN

August 2005 - December 2007

M.S. in Entomology and Plant Pathology, GPA 3.83

<u>Thesis:</u> Revision of Tomoceridae (Collembola) in Great Smoky Mountains National Park and Southern Appalachians; Advisor: Dr. Ernest Bernard

## North Carolina State University, Raleigh, NC

January 2008-present

Ph.D. in Entomology, GPA 3.87 (Expected graduation: December 2011) Dissertation topic: Feeding Behavior of the Hemlock Woolly Adelgid in Relation to Host Plant Resistance; Advisor: Dr. Fred Hain

#### RELEVENT EMPLOYMENT

#### Ph.D. Graduate Research Assistant

2008-present

North Carolina State University, Department of Entomology Investigated mechanisms of host resistance to the hemlock woolly adelgid, studied behavior.

#### M.S. Graduate Research Assistant

2005-2007

University of Tennessee, Department of Entomology and Plant Pathology Revised family of springtails (Collembola: Tomoceridae) based on morphological and molecular methods; described 2 new species of the southern Appalachians.

### Student Curator, Texas A&M University Insect Collection

2000-2005

Assisted in the curation of the university's insect museum: critical point dried flies, identified specimens to species level, spread insect wings, point mounted insects, labeled insects, loaned out collection equipment

#### NON-DEGREE RELATED RESEARCH AND EXTENSION EXPERIENCE

# **USDA - Cooperative Agriculture Pest Survey Identifier**

2005-2007

Identified moth, beetle, and wasp specimens captured in survey traps throughout the state of Tennessee; reported state record of a bark beetle (*Xylosandrus mutilatus*)

### TEACHING EXPERIENCE

### **Instructor, Preparing the Professoriate**

2010-2011

North Carolina State University, Raleigh, NC; <u>ENT 201Q: Insects and People</u> – Taught undergraduate class of 23, mentored with faculty (Dr. Clyde Sorenson), developed course materials and projects, incorporated interactive teaching and inquiry-guided learning, attended biweekly teaching seminars for Preparing the Professoriate and First Year Inquiry programs.

**Teaching Assistant** 

2010

North Carolina State University, Raleigh, NC; <u>ENT 402</u>: <u>Forest Entomology</u> – Led two weekly labs for class of 40 students, developed and graded weekly insect identification quizzes, led field trips, graded insect collections.

**Teaching Assistant** 

2008-2009

North Carolina State University, Raleigh, NC; <u>ENT 305</u>: <u>Introduction to Forensic Entomology</u> – Developed and led lab activities, assisted in course curriculum development, designed semester project, facilitated mock trial.

Guest lecturer October 2010

North Carolina State University, Raleigh, NC <u>ENT 550: Fundamentals of Insect Control</u> – Lectured in traditional format, topic: pesticides

## **Introduction to Teaching Seminar**

March 2010

North Carolina State University, Preparing Future Leaders Program

#### RESEARCH SUPPORT/GRANTS

**NCES Travel Award** 

March 2011

North Carolina Entomological Society, received travel award, \$500, Author: K. Oten

### **Excellence in Extension and Outreach Award**

September 2010

NCSU, Dept. of Entomology; received travel award, \$500, Author: K. Oten

## Research Grant, Forest Service, Southern Research Station

**April 2010** 

Grant to fund 1 yr research; results from work used in development; Title: Feeding Behavior of Hemlock Woolly Adelgid in Relation to Host Suitability; Authors: F. Hain, A. Cohen, K. Oten

**Small Equipment Grant,** NCSU, College of Agriculture & Life Science **January 2008** Awarded \$5931 to purchase microscope; Authors: K. Felderhoff (Oten), F. Hain

#### Discover Life in America Research Minigrant

March 2007

Great Smoky Mountains National Park, awarded \$2500 to survey Collembola; Authors: K. Felderhoff (Oten) and E. Bernard

## **PUBLICATIONS (REFEREED)**

**Felderhoff (Oten), K.L.**, E.C. Bernard, and J.K. Moulton. 2010. Survey of *Pogonognathellus* Börner (Collembola: Tomoceridae) in the southern Appalachians based on morphological and molecular data. Ann. Ent. Soc. Am. 103(4):472-491.

# PUBLICATIONS (NON-REFEREED)

**Oten, K. F.**, A.C. Cohen, J.B. Strider and F.P. Hain. 2010. Investigating host resistance using scanning electron microscopy. *In* B. Onken and R.C. Reardon [eds.], Proceedings, Fifth Symposium on Hemlock Woolly Adelgid in the Eastern United States; 17-19 Aug 2010; Asheville, NC. Morgantown, WV: U.S.D.A., Forest Service, Forest Health Technology Enterprise Team.

Alexander, E. A., S. E. Alexander, A. S. Castagnola, **K. L. Felderhoff (Oten)**, A. D. Haddow, J. A. Hansen, A. J. Jacobson and M. E. Rosen. 2009. Research on potential insect invasive species that can transmit animal disease should take precedence over invasive crop pests and diseases: Pro position. *In* W. V. Aponte-Cordero and A. L. Nielson. Understanding biosecurity and its limitations: Student debate. American Entomologist 55: 148-156.

Bernard, E.C. and **K.L. Felderhoff (Oten)**. 2007. Biodiversity explosion: Collembola (springtails) of Great Smoky Mountains National Park. Southeastern Biol. 6:175-182.

Sachs, S. and **K. Felderhoff (Oten)**. 2007. Amazing grace: High school students rediscover a lost species. Appalachian Highlands Science Journal 2: 3.

**Felderhoff (Oten), K.L.,** C.T. Boleman and T.W. Fuchs. 2005. Evaluating the effectiveness of the Texas Integrated Pest Management internship program. American Entomologist 51(2): 70-73.

## PRESENTATIONS AT PROFESSIONAL MEETINGS

### Biology Graduate Student Symposium, NCSU

April 8, 2011

(Raleigh, NC) 15 min. oral presentation: "Beauty and the Tiny Beast: Feeding Biology of the Hemlock Woolly Adelgid and Implications for Host-Plant Resistance"

**Entomological Society of America,** Southeastern Branch Meeting March 19-22, 2011 (San Juan, Puerto Rico) 12 min. oral presentation: "Investigating Host Plant Resistance of Hemlock (*Tsuga* spp.) to the Hemlock Woolly Adelgid (*Adelges tsugae*)"

**20**<sup>th</sup> **Ann. Southern Appalachian Forest Entomology/Pathology Seminar** March 10, 2011 (Crossnore, NC) 20 min. oral presentation: "Beauty and the Tiny Beast: Investigations into Feeding Site Selection by the Hemlock Woolly Adelgid"

**Entomological Society of America,** National Meeting December 12-15, 2010 (San Diego, CA) 12 min. oral presentation: "Determining Host Resistance for the Hemlock Woolly Adelgid (*Adelges tsugae*)"

# North Carolina Entomological Society Meeting

November 5, 2010

(Raleigh, NC) Poster presentation: "Investigating Hemlock Woolly Adelgid Biology, Feeding Behavior, and Host Plant Resistance"

### Fifth Hemlock Woolly Adelgid Symposium

August 17-19, 2010

(Asheville, NC) 20 min. oral presentation: "Investigating Host Resistance Using Scanning Electron Microscopy"

Southern Forest Insect Work Conference

July 20-23, 2010

(Wilmington, NC) 12 min. oral presentation, student session: "Feeding Behavior of the Hemlock Woolly Adelgid"

#### **Southern Forest Insect Work Conference**

July 20-23, 2010

(Wilmington, NC) 20 min. oral presentation, Hemlock Woolly Adelgid Symposium: "The Interactions of Woolly Adelgids and Their Hosts: Potential for Host Resistance and Restoration"

# NCSU Graduate Student Research Symposium

March 10, 2010

(Raleigh, NC) Poster: "Scanning Electron Microscopy as a Tool in Understanding Hemlock Woolly Adelgid Biology"

19<sup>th</sup> Ann. Southern Appalachian Forest Entomology/Pathology Seminar March 4, 2010 (Crossnore, NC) 10 min. oral presentation: "Silent But Deadly: Investigations into HWA Feeding Mechanisms and Sources of Host Plant Resistance"

# **Entomology Graduate Student Symposium, NCSU**

February 12, 2010

(Raleigh, NC) 12 min. oral presentation: "Beauty and the Beast: The tale of the hemlock woolly adelgid and the putatively resistant hemlock"

# USDA Interagency Research Forum on Gypsy Moth and Other Invasive Species

(Annapolis, MD) January 12-15, 2010; Poster presentation: "Scanning Electron Microscopy as a Tool in Understanding Hemlock Woolly Adelgid Biology, Feeding Behavior, and Host Plant Resistance"

# Entomological Society of America, National Meeting

December 13-16, 2009

(Indianapolis, IN) 12 min. oral presentation: "SEM Images of Western and Eastern Populations of Hemlock Woolly Adelgid"

## **Southern Forest Insect Work Conference**

July 28-31, 2009

(Gulfport, MS) 12 min. oral presentation, student session: "Scanning Electron Images of *Adelges tsugae*: More than just 'cottony stuff'"

### **Southern Forest Insect Work Conference**

July 28-31, 2009

(Gulfport, MS) 20 min. oral presentation: Host Interactions with Non-Native Pests Symposium: "Host Resistance in Hemlocks: The Cure for the Common Adelgid?"

**18<sup>th</sup> Ann. Southern Appalachian Forest Entomology/Pathology Seminar** March 2009 (Crossnore, NC) 10 min. oral presentation: "Adelgids with an Appetite"

## Entomology Graduate Student Symposium, NCSU

February 13, 2009

(Raleigh, NC) 12 min. oral presentation: "Feeding Behavior of the Hemlock Woolly Adelgid"

### Southern Forest Insect Work Conference,

August 4-7 2008

(Chattanooga, TN) 12 min. oral presentation, student symposium: "Feeding of the Hemlock Woolly Adelgid, *Adelges tsugae*: A Research Proposal"

17<sup>th</sup> Ann. Southern Appalachian Forest Entomology/Pathology Seminar March 8, 2008 (Crossnore, NC) 10 min. oral presentation: "Feeding of the Hemlock Woolly Adelgid"

## **Entomology Graduate Student Symposium, NCSU**

February 15, 2008

(Raleigh, NC) 12 min. oral presentation: "Revision of Tomoceridae in the southern Appalachians"

#### **Entomological Society of America**, National Meeting

December 10, 2007

(San Diego, CA) 12 min. oral presentation: "Revision of Pogonognathellus (Collembola:

Tomoceridae) of the southern Appalachians using morphological and molecular approaches"

### **Discover Life in America Annual Meeting**

December 7-10, 2007

(Gatlinburg, TN) 10 min. oral presentation: "Diversity of Tomoceridae (Collembola) in Great Smoky Mountains National Park"

**16<sup>th</sup> Ann. Southern Appalachian Forest Entomology/Pathology Seminar** March 22, 2007 (Crossnore, NC) 10 min. oral presentation: "Springtails of Great Smoky Mountains National Park and the Blue Ridge Parkway"

Entomological Society of America, Southeastern Branch Meeting

March 1-7, 2007

(Knoxville, TN) 12 min. oral presentation: "Revision of Tomoceridae (Collembola) of Great Smoky Mountains National Park using morphological and molecular approaches"

Entomological Society of America, National Meeting

December 10-13, 2006

(Indianapolis, IN) Poster: "Revision of Tomoceridae (Collembola) of Great Smoky

Mountains National Park using morphological and molecular approaches"

**Discover Life in America Annual Meeting** 

December 6-9, 2006

(Gatlinburg, TN) 10 min. oral presentation: "Diversity of Tomoceridae (Collembola) in Great Smoky Mountains National Park"

**15**<sup>th</sup> Ann. Southern Appalachian Forest Entomology/Pathology Seminar March 9, 2006 (Crossnore, NC) 10 min. oral presentation: "Tomoceridae of South Appalachians: Research proposal"

Entomological Society of America, Southeastern Branch Meeting

March 5-8, 2006

(Wilmington, NC) Poster: "Tomoceridae of the Southern Appalachians"

#### PROFESSIONAL MEMBERSHIPS

ESA – Entomological Society of America	2003-present
NCES – North Carolina Entomological Society	2008-present
AAAS - American Association for the Advancement of Science	2010-present
Gamma Sigma Delta – Honor Society of Agriculture	2006-present
TES – Tennessee Entomological Society	2006-2007

#### PROFESSIONAL ACTIVITIES

Science Fair Judge, St. Timothy's School, Raleigh
Judged science fair projects for grades 1-8
Southern Forest Insect Work Conference
(Gulfport, MS) Moderated Graduate Student Session
Southern Forest Insect Work Conference
(Chattanooga, TN) Moderated Student Session
Discover Life in America, All-Taxa Biodiversity Inventory
(Great Smoky Mountains National Park) Collembola Working Group

### **COMMITTEE PARTICIPATION**

**EGSA** – Entomology Graduate Student Association

2008-present

North Carolina State University, Treasurer (2008-present), Holiday Party Entertainment Committee (2010)

**Host-Plant Resistance Debate Team** – North Carolina State University

2011

Preparing for a debate (topic: host-plant resistance and transgenics) which will be held at the Annual Meeting of the Entomological Society of America; coach: Dr. Robert Jetton

**Linnaean Games Team** – Participated in trivia game at ESA meetings, Represented Texas A&M University (2004-2005), University of Tennessee (2006-2007), North Carolina State University (present)

**GSA** – Graduate Student Association, Entomology and Plant Pathology

2005-2007

University of Tennessee, vice-president, social chair

**GSS** – Graduate Student Senate

2006-2007

University of Tennessee, Department of Entomology and Plant Pathology representative

**Biosecurity Debate Team** – University of Tennessee

2007

Prepared for and debated at national ESA meeting debate (topic: biosecurity); coach: Dr. Reid Gerhardt

Seminar Student Committee – University of Tennessee	2006-2007
Scheduled seminar speakers for academic year	
Open House Ad-hoc Committee – University of Tennessee	2006
Student representative for Department of Entomology and Plant Pathology	
UESO – Undergraduate Entomology Student Organization	2001-2005
Texas A&M University, president (2004-2005), vice-president (2003-2004)	

# HONORS AND AWARDS

Preparing the Professoriate Fellowship	Academic Year 2010-2011
North Carolina State University	
Third Place, Ph.D. Oral Paper Presentation	March 2011
Southeastern Branch Meeting, Entomological Society of America	
First Place, Student Poster Competition	November 2010
North Carolina Entomological Society, Annual Meeting	
Second Place, Poster Presentation	March 2010
Graduate Student Research Symposium, North Carolina State Uni	versity
First Place, M.S. Oral Paper Presentation	March 2007
Southeastern Branch Meeting, Entomological Society of America	
Winner in "Photomicroscopy" Category, Photo Salon	March 2007
Southeastern Branch Meeting, Entomological Society of America	
Outstanding Undergraduate Student Award	May 2005
Department of Entomology, Texas A&M University	