

**10<sup>th</sup> Biennial Conference on University Education in Natural Resources**  
**Auburn University • Auburn, AL**  
**March 13-15, 2014**

**Thursday, March 13 •**

2:30pm – 5:00 pm	<b>Walking Tour:</b> New LEED recreation facility and AU campus tour. Meet in AU Hotel lobby at 2:30pm.
5:00pm – 7:00 pm	<b>Conference Registration</b> (at The Hotel at Auburn University reception area)
7:00pm – 9:00pm	<b>Welcome / Meet and Greet Reception / hors d'oeuvres</b> Location: <a href="#">The Hound Pub / Restaurant</a> , 124 Tichenor Avenue, Downtown Auburn

**Friday, March 14 •**

7:00am – 8:20am	<b>Breakfast provided in the SFWS Conference Hall &amp; Conference Registration</b> Vans available outside the hotel lobby beginning at 6:50am through 8:00am. 15 minute walk otherwise.
8:20am - 8:30am	<b>Conference Opening Remarks</b> <b>Welcome:</b> Wayde Morse <b>Dean's comments:</b> SFWS Dean James Shepard
8:30am - 9:00am	<b>Keynote Speaker:</b> Kieran Lindsey, Virginia Tech "Almost Everything You Ever Wanted to Know About MOOCS... or How to Stop Grading Papers and Start Changing the World"
9:00am - 9:15am	<b>Break with coffee/Conference Registration</b>

9:15am - 10:55am	<b>Breakout Session I</b>			
	Innovations in Pedagogy: Research (Room 1221)	Partnerships and Collaboration (Room 1223)	Communication (Room 1224)	
	Moderator: Wayde Morse	Moderator: Miriam Wyman	Moderator: Emily Stutzman Jones	
9:15-9:40	<b>Structured team work assignments in STEM courses: An instructor's learning process</b> Lech Muszynski	<b>Multi-institutional collaboration to develop a renewable energy assessment program</b> John Diaz et al.	<b>Teaching writing in a professional development context</b> Sarah Covert and Emily Saunders	
9:40-10:05	<b>Recruiting and retaining culturally diverse students in natural resource degree programs</b> Kelly Balcarczyk et al.	<b>Multi-campus collaborations and long term data sets: Student use of permanent forest plots to address regional or continental-scale ecological questions, using the EREN model</b> Karen Kuers et al.	<b>Science and citizenship in natural resources education</b> Frans Padt et al.	
10:05-10:30	<b>Case comparison of geospatial learning outcomes assessment</b> David Carr et al.	<b>Engaging students in experimental learning: international research and cultural experience of natural resource and environmental sciences in China</b> Yong Wang et al.	<b>Communication courses in natural science schools: A web-based content analysis</b> Christos Giannoulis	
10:30-10:55	<b>The effect of environmental education on attitudes and behavior toward biodiversity conservation: A case study in protected areas in Nepal</b> Samridhi Shrestha	<b>Science and the Public Interface: A Partnership to Develop Courses to Equip Informal Science Educators to Engage the Public regarding Complex and Controversial Science Topics</b> Theresa Coble et al.	<b>Turning field exercises into digital stories for improving communication skills</b> Thomas Dean	

10:55am - 11:10am	<b>Break with refreshments</b>			
11:10am - 12:00pm	<b>Breakout Session II</b>			
		Innovations in Pedagogy: Experiential Learning (Room 1221)	Innovations in Pedagogy: Experiential Learning (Room 1223)	Innovations in Pedagogy: Applied Learning (Room 1224)
		Moderator: Emily Stutzman Jones	Moderator: Beau Broadbeck	Moderator: Ferhat Citak
	11:10-11:35	<b>Developing future natural resource leaders through intensive on-campus experiences</b> Philip Smartt and Joey Mehlhorn	<b>An undergraduate model for integrating extension in the land grant university</b> Rod Williams	<b>Evolution and evaluation of an applied Master's program</b> Jessica Tomaszewski
	11:35-12:00	<b>Designing and implementing a natural resources themed residential learning community</b> Ethan Billingsley	<b>Raising the bar: A new model for integrating extension in the land grant university</b> Brian MacGowan	<b>Poster Children: A project to improve students' research, writing, and analysis skills</b> Sarah Vonhof
12:00pm - 1:20pm	<p><b>Lunch provided in the SFWS Conference Hall and Poster Session</b></p> <p><b>Announcements:</b></p> <p><b>Conference logistics &amp; evening event:</b> Ed Loewenstein</p> <p><b>Journal of Forestry:</b> Special Issue on Forestry Education; Pat Stephens Williams</p> <p><b>Poster Session: 12:50pm - 1:20pm</b></p> <p>Posters will be set up all conference, but will be attended by authors during this time period. Please set up your posters on rails in hallway outside of SFWS Conference Hall during morning break.</p> <ul style="list-style-type: none"> <li>• <b>Environmental and health impacts of micro-hydro in a rural area of Nepal: A case study of a Nepalese village</b> Chiranjibi Bhattarai</li> <li>• <b>The Outdoor Latino Learning Initiative (OLLI): Connecting Latino Youth and Communities in South Texas to Natural Resource Education, Stewardship, and Nature-Based Opportunities</b> Samuel Camarillo, Tamberly Conway, and Jeremy Stovall</li> <li>• <b>Inspiration Dissemination: Science Communication for Students</b> Joey Hulbert and Zhian Kamvar</li> <li>• <b>Do group assignment methods affect student grades?</b> Larkin Powell</li> <li>• <b>Trees hold the answer: An interactive, web-based study tool for field courses</b> Jon Schoonover and Jackie Crim</li> <li>• <b>The Upside and Downside of Undergraduate Teaching Assistantships</b> Jess Stottlar and James Schofield</li> <li>• <b>Undergraduate research as a leadership tool</b> Pat Stephens Williams</li> </ul>			

1:20pm - 3:00pm	<b>Breakout Session III</b> <table border="1" data-bbox="402 117 1490 961"> <tr> <td data-bbox="402 117 578 254"></td> <td data-bbox="578 117 899 254">Reaching out to Minorities (Room 1221)</td> <td data-bbox="899 117 1211 254">Innovations in Pedagogy: Curriculum Development (Room 1223)</td> <td data-bbox="1211 117 1490 254">Innovations in Pedagogy: Applied Learning (Room 1224)</td> </tr> <tr> <td data-bbox="402 254 578 327"></td> <td data-bbox="578 254 899 327">Moderator: Beau Broadbeck</td> <td data-bbox="899 254 1211 327">Moderator: Ferhat Citak</td> <td data-bbox="1211 254 1490 327">Introduction: Miriam Wyman</td> </tr> <tr> <td data-bbox="402 327 578 485">1:20-1:45</td> <td data-bbox="578 327 899 485"><b>African Americans and wildlands in Alabama</b> Xiongwen Chen</td> <td data-bbox="899 327 1211 485"><b>Filling in the gaps: using a first year experience class to prepare freshmen for academic success</b> Dean Stauffer and Kim Hodge Cowgill</td> <td data-bbox="1211 327 1490 485"><b>Workshop: Effort matters: Specific strategies for instructors and students to support better learning and greater achievement</b> Jan Thompson et al.</td> </tr> <tr> <td data-bbox="402 485 578 642">1:45-2:10</td> <td data-bbox="578 485 899 642"><b>Embedded research in gateway science courses as a best practice for retaining underrepresented students</b> Donald Rodriguez</td> <td data-bbox="899 485 1211 642"><b>Natural resources math - the worst best class you'll ever teach</b> James Harding</td> <td data-bbox="1211 485 1490 642"></td> </tr> <tr> <td data-bbox="402 642 578 789">2:10-2:35</td> <td data-bbox="578 642 899 789"><b>Environmental Education extension programs for non-English speakers</b> Jason Gordon</td> <td data-bbox="899 642 1211 789"><b>Wildlife Curriculum</b> Todd Steury</td> <td data-bbox="1211 642 1490 789"></td> </tr> <tr> <td data-bbox="402 789 578 961">2:35-3:00</td> <td data-bbox="578 789 899 961"><b>A novel pathway to introduce Native American students to natural resources programs</b> Anthony Davis et al.</td> <td data-bbox="899 789 1211 961"><b>Integrating research and writing support to improve capstone projects</b> Patricia Hartman and Emily Stutzman</td> <td data-bbox="1211 789 1490 961"></td> </tr> </table>				Reaching out to Minorities (Room 1221)	Innovations in Pedagogy: Curriculum Development (Room 1223)	Innovations in Pedagogy: Applied Learning (Room 1224)		Moderator: Beau Broadbeck	Moderator: Ferhat Citak	Introduction: Miriam Wyman	1:20-1:45	<b>African Americans and wildlands in Alabama</b> Xiongwen Chen	<b>Filling in the gaps: using a first year experience class to prepare freshmen for academic success</b> Dean Stauffer and Kim Hodge Cowgill	<b>Workshop: Effort matters: Specific strategies for instructors and students to support better learning and greater achievement</b> Jan Thompson et al.	1:45-2:10	<b>Embedded research in gateway science courses as a best practice for retaining underrepresented students</b> Donald Rodriguez	<b>Natural resources math - the worst best class you'll ever teach</b> James Harding		2:10-2:35	<b>Environmental Education extension programs for non-English speakers</b> Jason Gordon	<b>Wildlife Curriculum</b> Todd Steury		2:35-3:00	<b>A novel pathway to introduce Native American students to natural resources programs</b> Anthony Davis et al.	<b>Integrating research and writing support to improve capstone projects</b> Patricia Hartman and Emily Stutzman	
	Reaching out to Minorities (Room 1221)	Innovations in Pedagogy: Curriculum Development (Room 1223)	Innovations in Pedagogy: Applied Learning (Room 1224)																								
	Moderator: Beau Broadbeck	Moderator: Ferhat Citak	Introduction: Miriam Wyman																								
1:20-1:45	<b>African Americans and wildlands in Alabama</b> Xiongwen Chen	<b>Filling in the gaps: using a first year experience class to prepare freshmen for academic success</b> Dean Stauffer and Kim Hodge Cowgill	<b>Workshop: Effort matters: Specific strategies for instructors and students to support better learning and greater achievement</b> Jan Thompson et al.																								
1:45-2:10	<b>Embedded research in gateway science courses as a best practice for retaining underrepresented students</b> Donald Rodriguez	<b>Natural resources math - the worst best class you'll ever teach</b> James Harding																									
2:10-2:35	<b>Environmental Education extension programs for non-English speakers</b> Jason Gordon	<b>Wildlife Curriculum</b> Todd Steury																									
2:35-3:00	<b>A novel pathway to introduce Native American students to natural resources programs</b> Anthony Davis et al.	<b>Integrating research and writing support to improve capstone projects</b> Patricia Hartman and Emily Stutzman																									
3:00pm - 3:15pm	<b>Break with refreshments</b>																										
3:15pm - 5:15pm	<b>Workshop Session I</b> <table border="1" data-bbox="402 1079 1490 1402"> <tr> <td data-bbox="402 1079 763 1192">(Room 1221) Introduction: Wayde Morse</td> <td data-bbox="763 1079 1133 1192">(Room 1223) Introduction: Cody Cox</td> <td data-bbox="1133 1079 1490 1192">(Room 1224) Introduction: Beau Broadbeck</td> </tr> <tr> <td data-bbox="402 1192 763 1402"><b>Improving critical thinking in natural resources education through instructional design</b> Geoffrey Habron et al.</td> <td data-bbox="763 1192 1133 1402"><b>Communications in the natural resource classroom: How to up the ante without upping the workload</b> Pat Stevens Williams</td> <td data-bbox="1133 1192 1490 1402"><b>Flipped Learning In Natural Resources: How To Get Started</b> Rich Etchberger</td> </tr> </table>			(Room 1221) Introduction: Wayde Morse	(Room 1223) Introduction: Cody Cox	(Room 1224) Introduction: Beau Broadbeck	<b>Improving critical thinking in natural resources education through instructional design</b> Geoffrey Habron et al.	<b>Communications in the natural resource classroom: How to up the ante without upping the workload</b> Pat Stevens Williams	<b>Flipped Learning In Natural Resources: How To Get Started</b> Rich Etchberger																		
(Room 1221) Introduction: Wayde Morse	(Room 1223) Introduction: Cody Cox	(Room 1224) Introduction: Beau Broadbeck																									
<b>Improving critical thinking in natural resources education through instructional design</b> Geoffrey Habron et al.	<b>Communications in the natural resource classroom: How to up the ante without upping the workload</b> Pat Stevens Williams	<b>Flipped Learning In Natural Resources: How To Get Started</b> Rich Etchberger																									
6:00pm - 10:00pm	<b>Bus pick-up for evening banquet at The Red Barn</b> Beginning at 5:15pm, buses will pick-up participants at the SFWS for travel back to The Hotel at Auburn University. Beginning at 5:45pm busses will begin several round trips from the Hotel at Auburn University to the Red Barn. The Hotel to the Red Barn is about a 20 minute walk otherwise.  Traditional Southern dinner will begin at 6:00pm. Musical entertainment from WireGrass from 6:30-9:00pm. Busses stop running at 10:00pm.																										

## Saturday, March 15 •

7:00am – 8:00am	<b>Breakfast provided in the SFWS Conference Hall</b> Vans available outside the hotel lobby beginning at 6:50am through 8:00am. 15 minute walk otherwise.																				
8:00am - 8:30am	<b>Keynote Speaker:</b> Eve Brantley, Auburn University "Ex-Stream Makeover - Building a Better Creek One Student at a Time."																				
8:30-8:45am	<b>Break with coffee</b>																				
8:45am - 10:00am	<b>Breakout Session IV</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;">Innovations in Pedagogy: Field Courses (Room 1221)</td> <td style="width: 25%;">Service, Learning, and Internships (Room 1223)</td> <td style="width: 25%;">Innovations in Pedagogy: Applied Learning (Room 1224)</td> </tr> <tr> <td></td> <td>Moderator: Wayne Morse</td> <td>Moderator: Miriam Wyman</td> <td>Introduction: Ferhat Citak</td> </tr> <tr> <td style="background-color: #e0e0e0;">8:45-9:10</td> <td> <b>Student research guiding resource protection and improved visitor experience in Canada's mountain national parks</b>                      Diane Draper and Kathy Rettie                 </td> <td> <b>Implementing effective academic practices in a summer research internship program on water and natural hazards management in a Mexican University</b>                      Oscar Frausto-Martinez                 </td> <td rowspan="3"> <b>Panel: Developing Student Writers</b>                      Emily Stutzman Jones et al.                 </td> </tr> <tr> <td style="background-color: #e0e0e0;">9:10-9:35</td> <td> <b>The wild side of education: Creating experiential education opportunities at public universities</b>                      Natalie Dawson                 </td> <td> <b>The value of graduate undergraduate mentorship programs</b>                      Joseph Hulbert                 </td> </tr> <tr> <td style="background-color: #e0e0e0;">9:35-10:00</td> <td> <b>Providing the essential foundation: Learning about forest ecosystems in the field as the basis for their management</b>                      David Hix                 </td> <td> <b>Two years in: reflections on the PINEMAP undergraduate fellowship program</b>                      John Kidd et al.                 </td> </tr> </table>				Innovations in Pedagogy: Field Courses (Room 1221)	Service, Learning, and Internships (Room 1223)	Innovations in Pedagogy: Applied Learning (Room 1224)		Moderator: Wayne Morse	Moderator: Miriam Wyman	Introduction: Ferhat Citak	8:45-9:10	<b>Student research guiding resource protection and improved visitor experience in Canada's mountain national parks</b> Diane Draper and Kathy Rettie	<b>Implementing effective academic practices in a summer research internship program on water and natural hazards management in a Mexican University</b> Oscar Frausto-Martinez	<b>Panel: Developing Student Writers</b> Emily Stutzman Jones et al.	9:10-9:35	<b>The wild side of education: Creating experiential education opportunities at public universities</b> Natalie Dawson	<b>The value of graduate undergraduate mentorship programs</b> Joseph Hulbert	9:35-10:00	<b>Providing the essential foundation: Learning about forest ecosystems in the field as the basis for their management</b> David Hix	<b>Two years in: reflections on the PINEMAP undergraduate fellowship program</b> John Kidd et al.
	Innovations in Pedagogy: Field Courses (Room 1221)	Service, Learning, and Internships (Room 1223)	Innovations in Pedagogy: Applied Learning (Room 1224)																		
	Moderator: Wayne Morse	Moderator: Miriam Wyman	Introduction: Ferhat Citak																		
8:45-9:10	<b>Student research guiding resource protection and improved visitor experience in Canada's mountain national parks</b> Diane Draper and Kathy Rettie	<b>Implementing effective academic practices in a summer research internship program on water and natural hazards management in a Mexican University</b> Oscar Frausto-Martinez	<b>Panel: Developing Student Writers</b> Emily Stutzman Jones et al.																		
9:10-9:35	<b>The wild side of education: Creating experiential education opportunities at public universities</b> Natalie Dawson	<b>The value of graduate undergraduate mentorship programs</b> Joseph Hulbert																			
9:35-10:00	<b>Providing the essential foundation: Learning about forest ecosystems in the field as the basis for their management</b> David Hix	<b>Two years in: reflections on the PINEMAP undergraduate fellowship program</b> John Kidd et al.																			
10:00am - 10:15am	<b>Break with refreshments</b>																				
10:15am - 11:45am	<b>Workshop Session II</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; background-color: #e0e0e0;">(Room 1221) Introduction: Cody Cox</td> <td style="width: 33%; background-color: #e0e0e0;">(Room 1223) Introduction: Miriam Wyman</td> <td style="width: 33%; background-color: #e0e0e0;">(Room 1224) Introduction: Wayne Morse</td> </tr> <tr> <td> <b>Sustainability and Systems Thinking Processes as a Framework for Understanding and Addressing Natural Resource Challenges</b>                      Mike Kensler                 </td> <td> <b>Producing Society-Ready Foresters: A Research-based Process to Revise the B.S. in Forestry Curriculum at Stephen F. Austin State University</b>                      Theresa Coble et al.                 </td> <td> <b>Broadening and Deepening Service-Learning Partnerships</b>                      Annette Moore et al.                 </td> </tr> </table>			(Room 1221) Introduction: Cody Cox	(Room 1223) Introduction: Miriam Wyman	(Room 1224) Introduction: Wayne Morse	<b>Sustainability and Systems Thinking Processes as a Framework for Understanding and Addressing Natural Resource Challenges</b> Mike Kensler	<b>Producing Society-Ready Foresters: A Research-based Process to Revise the B.S. in Forestry Curriculum at Stephen F. Austin State University</b> Theresa Coble et al.	<b>Broadening and Deepening Service-Learning Partnerships</b> Annette Moore et al.												
(Room 1221) Introduction: Cody Cox	(Room 1223) Introduction: Miriam Wyman	(Room 1224) Introduction: Wayne Morse																			
<b>Sustainability and Systems Thinking Processes as a Framework for Understanding and Addressing Natural Resource Challenges</b> Mike Kensler	<b>Producing Society-Ready Foresters: A Research-based Process to Revise the B.S. in Forestry Curriculum at Stephen F. Austin State University</b> Theresa Coble et al.	<b>Broadening and Deepening Service-Learning Partnerships</b> Annette Moore et al.																			
11:45am - 12:45pm	<b>Lunch provided in the SFWS Conference Hall</b> <b>Business Meeting:</b> If you are interested in hosting BCUENR in the future please attend.																				
12:45pm – 1:35pm	<b>Breakout Session V</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;">Service, Learning, and Internships (Room 1221)</td> <td style="width: 25%;">Innovations in Pedagogy: Applied Learning (Room 1223)</td> </tr> <tr> <td></td> <td>Moderator: Wayne Morse</td> <td>Moderator: Ferhat Citak</td> </tr> <tr> <td style="background-color: #e0e0e0;">12:45-1:10</td> <td> <b>An overview of the internship program at the University of Wisconsin - Stevens Point College of Natural Resources - recent developments and implications of the summer 2013 unpaid internship court ruling</b>                      Paul Doruska                 </td> <td> <b>Technology for integrating and grading diverse styles in a large writing-intensive introductory environmental science course</b>                      Robert Harrison                 </td> </tr> <tr> <td style="background-color: #e0e0e0;">1:10-1:35</td> <td> <b>Service learning basis of the forestry capstone at the University of Montana</b>                      Beth Dodson                 </td> <td> <b>Integrating tablet technology into forestry field exercises</b>                      Andrew Sánchez Meador et al.                 </td> </tr> </table>				Service, Learning, and Internships (Room 1221)	Innovations in Pedagogy: Applied Learning (Room 1223)		Moderator: Wayne Morse	Moderator: Ferhat Citak	12:45-1:10	<b>An overview of the internship program at the University of Wisconsin - Stevens Point College of Natural Resources - recent developments and implications of the summer 2013 unpaid internship court ruling</b> Paul Doruska	<b>Technology for integrating and grading diverse styles in a large writing-intensive introductory environmental science course</b> Robert Harrison	1:10-1:35	<b>Service learning basis of the forestry capstone at the University of Montana</b> Beth Dodson	<b>Integrating tablet technology into forestry field exercises</b> Andrew Sánchez Meador et al.						
	Service, Learning, and Internships (Room 1221)	Innovations in Pedagogy: Applied Learning (Room 1223)																			
	Moderator: Wayne Morse	Moderator: Ferhat Citak																			
12:45-1:10	<b>An overview of the internship program at the University of Wisconsin - Stevens Point College of Natural Resources - recent developments and implications of the summer 2013 unpaid internship court ruling</b> Paul Doruska	<b>Technology for integrating and grading diverse styles in a large writing-intensive introductory environmental science course</b> Robert Harrison																			
1:10-1:35	<b>Service learning basis of the forestry capstone at the University of Montana</b> Beth Dodson	<b>Integrating tablet technology into forestry field exercises</b> Andrew Sánchez Meador et al.																			
1:35pm - 1:45pm	<b>Closing Remarks:</b> Wayne Morse & Ed Loewenstein																				

**Keynote: Friday**  
**Kieran Lindsey,**  
**Ph.D.**

Kieran Lindsey is an urban wildlife biologist and Associate Director of Online Programming with the Center for Leadership in Global Sustainability (CLiGS) at Virginia Tech's College of Natural Resources and Environment. She was first introduced to the virtual classroom as a graduate student, then used this experience to inform her approach to online courses design as a post-doc for Virginia Tech's Master of Natural Resources degree program. As Director of the Natural Resources Distance Learning Consortium (2009-2013), Dr. Lindsey helped to raise awareness and acceptance of online education in university natural resource curricula. A commitment to providing natural resource professionals with access to professional development opportunities, and to broadening the audience for environmental courses, has been a primary motivation behind Kieran's interest in Internet-based education technologies. Public outreach is another passion, one that has caused her to flirt with various forms of traditional and social media over the course of her career—as a columnist for the *Houston Chronicle* newspaper (1998–2001); as the producer, writer and host of *Wild Things Radio!*, aired by National Public Radio affiliate KUNM-FM in Albuquerque, NM (1999–2001); as the producer of an Emmy® Award winning educational documentary feature for PBS (1998); and on her blog, [Next-Door Nature](#). Most recently, Kieran has the dubious honor of serving as Animal-Vehicle Biologist at [Car Talk](#), one of NPR's most popular shows.

**Keynote: Saturday**  
**Eve Brantley,**  
**Ph.D.**

Eve Brantley is an Assistant Professor with the Auburn University Department of Crop, Soil and Environmental Sciences. She also serves as the Alabama Cooperative Extension System Water Resource Specialist. Eve has worked as a local watershed coordinator, facilitator for the Coastal Alabama Clean Water Partnership, and coordinator of a citizen water-monitoring program. Her degrees are from Berry College, Clemson University, and Auburn University.