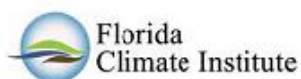


# SUSTAINING ECONOMIES AND NATURAL RESOURCES IN A CHANGING WORLD: KEY ROLE OF LAND GRANT UNIVERSITIES

**APRIL 2-3, 2013**

REITZ UNION | UNIVERSITY OF FLORIDA | GAINESVILLE, FL



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# Welcome

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We are pleased that you have joined us to celebrate the 150th anniversary of the Morrill Act of 1862, which provided states with the land that made it possible to establish Land Grant universities. This legislation was the first Federal aid to higher education and it gave people in America the opportunity to attend college and learn about agriculture and mechanical arts (now known as engineering). The University of Florida is proud of its heritage as a land-grant university (LGU) and of the great number of successes in fulfilling our mission to teach, provide research, and service.

The goals of this symposium are to celebrate past Land Grant University (LGU) successes and explore research and extension directions that will help the University of Florida and its partners address future challenges to Sustaining Economies and Natural Resources in a Changing World. Our objectives are:

- Better characterize the major challenges to sustaining economies and natural resources
- Identify state, national, and international research priorities needed to address the challenges
- Cultivate cooperation amongst academic, industrial, and governmental partnerships
- Ensure that our work continues to be relevant to society

We are proud to present speakers from both public and private entities bringing together researchers, industry leaders, and agencies to create dialogue which will help address key challenges and suggest visionary research and extension programs that should be targeted to achieve sustainable solutions. We want to emphasize our universities' important roles in global issues, not just local or US-centric ones.

We hope to honor the legacy of the Morrill Act by recognizing that LGUs played key roles in the scientific discoveries and technological advances that have shaped our state, nation, and world. Looking through that historical lens, together we will help launch UF and other LGUs into the next 150 years.

Sincerely,

**Dr. James W. Jones**

Distinguished Professor, Ag and  
Biological Engineering and  
Director, Florida Climate Institute

**Dr. Jack Payne**

Senior Vice-President  
for Agriculture and Natural  
Resources

**Dr. Kirk Hatfield**

Professor and Director,  
Engineering School of  
Sustainable Infrastructure  
and the Environment



# Agenda: Sustaining Economies and Natural Resources in a Changing World: Key Role of Land Grant Universities

Reitz Union | University of Florida | April 2-3, 2013

Tuesday, April 2	
AM	
Grand Ballroom	
7:30am	Continental Breakfast and Registration/Check-in
8:00-8:25am	<b>Opening Session: Welcome and Introductions:</b> <ul style="list-style-type: none"> <li>• Dr. James Jones, Event Co-Chair, Distinguished Professor and Director of the Florida Climate Institute</li> <li>• Marsha Stanton, Industry Relations Manager at Monsanto</li> <li>• Dr. Kirk Hatfield, Event Co-Chair, Professor and Director of the Engineering School of Sustainable Infrastructure &amp; Environment</li> <li>• Dr. Jack Payne, Senior Vice President for Agriculture and Natural Resources</li> </ul>
8:25-8:35	<b>The Morrill Act: Context and Vision:</b> <ul style="list-style-type: none"> <li>• Steve Merritt Seibert, Co-Founder TriSect LLC, Senior Strategic Advisor to UF/IFAS</li> </ul>
8:35-9:20am	<b>Opening Address:</b> <ul style="list-style-type: none"> <li>• Dr. John Ingram, Natural Environment Research Council (NERC) Food Security Leader, University of Oxford, UK</li> </ul>
9:20-10:15am	<b>Opening Presentation:</b> <ul style="list-style-type: none"> <li>• Dr. Sara Pryor, Provosts Professor of Atmospheric Science, Associate Vice Provost for Faculty and Academic Affairs, Indiana University</li> </ul>
10:15-10:30am	Break
10:30am-12:00pm	<b>Session I: Food Security and Ag Production:</b> <ul style="list-style-type: none"> <li>• Dr. Molly Jahn, Former Deputy and Acting Undersecretary of Agriculture, Professor in the Laboratory of Genetics and Department of Agronomy, Center for Sustainability and the Global Environment, University of Wisconsin-Madison</li> <li>• Dr. Fred Kirschenmann, Distinguished Fellow for the Leopold Center for Sustainable Agriculture, Iowa State University and President of Stone Barris Center for Food and Agriculture in NY</li> <li>• Dr. David McClary, DVM, Senior Technical Dairy Consultant, Elanco Animal Health</li> </ul>
PM	
Grand Ballroom	
12:00-1:30pm	<b>Lunch with Keynote Speaker:</b> <ul style="list-style-type: none"> <li>• Dr. Dave Gustafson, Director, ILSI-RF Center for Integrated Modeling of Sustainable Agriculture &amp; Nutrition Security (CIMSANS)</li> </ul>
1:30-2:50pm	<b>Session II: Energy:</b> <ul style="list-style-type: none"> <li>• Dr. Sam Baldwin, Chief Science Officer at the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy</li> <li>• Dr. Brent Shanks, Mike and Jean Steffenson Professor in Chemical and Biological Engineering and Director of NSF's Engineering Research Center for Bio-renewable Chemicals at Iowa State University</li> </ul>
2:50-4:10pm	<b>Session III: Infrastructure and Transportation:</b> <ul style="list-style-type: none"> <li>• Tim Jackson, PE, Senior Principal Planner, Kittelson &amp; Associates, Inc. Transportation Engineering, Orlando, FL</li> <li>• Dr. Josias Zietsman, Head of the Environment and Air Quality Division at Texas A &amp; M Transportation Institute (TTI)</li> <li>• Dr. Blair Feltmate, Associate Professor in the Faculty of Environment, University of Waterloo</li> </ul>
4:10-4:20pm	Break

4:20-5:30pm	<b>Breakout/Panel Sessions:</b>  <b>Food Security and Ag Production – Auditorium</b>  <b><u>Panelists in addition to speakers:</u></b> <ul style="list-style-type: none"><li>• Dr. Ken Boote, Professor Emeritus in Agronomy, UF/IFAS</li><li>• Dr. Walter Bowen, Director of International Programs in UF/IFAS</li></ul> <b><u>Moderator:</u></b> <ul style="list-style-type: none"><li>• Dr. Ken Quesenberry, Interim Chair of Agronomy, UF/IFAS</li></ul>	<b>Energy – Salon D</b>  <b><u>Panelists in addition to speakers:</u></b> <ul style="list-style-type: none"><li>• J.L. Martinez, Sr. Director Office of Clean Energy, Florida Power &amp; Light Company</li><li>• Dr. Gary Peter, Professor, School of Forest Resources and Conservation, UF/IFAS</li><li>• Patrick Sheehan, Executive Director, Office of Energy, Florida Department of Agriculture and Consumer Services (FDACS)</li></ul> <b><u>Moderator:</u></b> <ul style="list-style-type: none"><li>• Dr. Jennifer Curtis, Interim FESC Director, Associate Dean for Research, College of Engineering, Distinguished Professor of Chemical Engineering, UF</li></ul>	<b>Infrastructure and Transportation – Salon H</b>  <b><u>Panelists in addition to speakers:</u></b> <ul style="list-style-type: none"><li>• Jim Wood, Director of the Office of Policy Planning, Florida Department of Transportation (FDOT)</li><li>• Dr. Ruth Steiner, Associate Professor; Director: Center for Health and the Built Environment, Department of Urban and Regional Planning, UF</li></ul> <b><u>Moderator:</u></b> <ul style="list-style-type: none"><li>• Dr. Kirk Hatfield, Professor and Director of the Engineering School of Sustainable Infrastructure and Environment, UF</li></ul>
5:30-8:00pm	Poster Reception in Grand Ballroom		
<b>Wednesday, April 3</b>			
<b>AM</b>			
<b>Grand Ballroom</b>			
7:30am	Continental Breakfast		
8:00-9:45am	<b>Session IV: Wildlife and Natural Systems Management:</b> <ul style="list-style-type: none"><li>• John Pait, Sr. VP for Sales, Marketing, and Product Development for ArborGen</li><li>• Dr. Kier Klepzig, Assistant Director, Southern Research Station, USDA Forest Service</li><li>• Dr. Karl Havens, Director, Florida Sea Grant Program, Professor in the School of Forest Resources &amp; Conservation, UF/IFAS</li><li>• Dr. Thomas Eason, Deputy Director, Division of Habitat and Species Conservation, Florida Fish and Wildlife Conservation Commission</li></ul>		
9:45-10:00am	Break		
10:00-11:15am	<b>Session V: Sustainable Development:</b> <ul style="list-style-type: none"><li>• Rick Hirsekorn, P.E., CH2M HILL, Vice-President and New York City Area Office Manager</li><li>• Fred Merrill, Urban Planning Consultant, Principal at Sasaki Associates Architecture and Planning, Boston</li></ul>		

11:15-12:30am	<b>Networking Breakout/Panel Session</b> <b>Wildlife and Natural Systems Management – Salon D and H</b> <b><u>Panelists in addition to speakers:</u></b> <ul style="list-style-type: none"><li>• Dr. Thomas Hootor, Director, Center for Landscape Conservation Planning, Department of Landscape Architecture, College of Design Construction and Planning, UF</li><li>• Dr. Timothy White, Professor and Director of the School of Forest Resources and Conservation, UF/IFAS</li></ul> <b><u>Moderator:</u></b> <ul style="list-style-type: none"><li>• Dr. Tim Martin, Professor in the School of Forest Resources and Conservation, Director of the UF Carbon Resources Science Center, and Project Director of the NIFA funded PINEMAP project, UF</li></ul>	<b>Sustainable Development – Grand Ballroom</b> <b><u>Panelists in addition to speakers:</u></b> <ul style="list-style-type: none"><li>• Hal S. Knowles, III, PhD Candidate and Change Agent, UF/IFAS Program for Resource Efficient Communities</li><li>• Steven Lachnicht, AICP, Director of the Alachua County Growth Management Department</li><li>• Dr. Paul Zwick, Professor, Department of Urban and Regional Planning, College of Design, Construction and Planning UF</li></ul> <b><u>Moderator:</u></b> <ul style="list-style-type: none"><li>• Dr. Peggy Carr, Associate Dean for Undergraduate Students and Academic Affairs College of Design, Construction and Planning, Department of Landscape Architecture, UF</li></ul>
PM		
Grand Ballroom		
12:30-1:50pm	<b><u>Lunch with Keynote Speaker:</u></b> <ul style="list-style-type: none"><li>• Robert W. Bailey, P.E., BCEE, CH2M HILL Board Member, President – Water Business Group</li></ul>	
1:50-2:00pm	Break	
2:00-3:20pm	<b><u>Session VI: Sustainable Resource Practices:</u></b> <ul style="list-style-type: none"><li>• Dr. Nancy Gassman, Natural Resources Administrator, Energy and Sustainability Program, Broward County, FL</li><li>• Shelley Lauten, Partner TriSect LLC, former President of myregion.org, Program Manager for the Urban Land Institute</li><li>• Todd Powell, Senior Director of Real Estate, Plum Creek, Envision Alachua Project</li></ul>	
3:20-4:00pm	<b><u>Closing Synthesis Keynote:</u></b> <ul style="list-style-type: none"><li>• Ron Sims, Former Deputy Secretary for the U.S. Department of Housing and Urban Development, Former Executive of Martin Luther King Jr. County, Washington State</li></ul>	
4:00pm	Closing	

# Program Committee

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Special thanks to the program committee for all of their work on this event. We would like to thank:

**James W. Jones – Symposium Co-Chair**

*Distinguished Professor and Director*  
The Florida Climate Institute

**Kirk Hatfield – Symposium Co-Chair**

*Professor and Director*  
Engineering School for Sustainable Infrastructure  
and Environment

**Tim Anderson**

*Distinguished Professor and Director*  
Florida Energy Systems Consortium

**Peggy Carr**

*Associate Dean*  
College of Design Construction and Planning  
*Co-Director*  
Geoplan Center

**Geoffrey Dahl**

*Professor and Chair*  
Department of Animal Sciences

**Joan Dusky**

*Associate Dean*  
UF/IFAS Extension

**Lily Elefteriadou**

*Professor*  
Kisinger Campo  
*Director*  
Transportation Research Center

**Tom Frazer**

*Professor and Director*  
School of Natural Resources and Environment

**Wendy Graham**

*Carl S. Swisher Eminent Scholar*  
Water Resources  
*Director*  
UF Water Institute

**Ray Huffaker**

*Professor and Chair*  
Food and Resource Economics

**Pierce Jones**

*Professor and Extension Program Leader*  
Energy Programs

**Hal S. Knowles, III**

*PhD Candidate*  
SNRE  
*Change Agent*  
Program for Resource Efficient Communities

**Tim Martin**

*Professor and Project Director*  
PINEMAP project  
*Director*  
UF Carbon Resources Science Center

**Ken Quesenberry**

*Professor and Interim Chair*  
UF/IFAS Agronomy

**Thomas Ruppert**

*Esq., Coastal Planning Specialist*  
Florida Sea Grant

**Steve Sargent**

*Professor and Extension Postharvest Specialist,*  
UF/IFAS

**Alex Sheremet**

*Assistant Professor*  
Civil and Coastal Engineering

**Program hosted by**



# Opening Session



## **Dr. James Jones**

**Event Co-Chair, Distinguished Professor and Director of the Florida Climate Institute**

Dr. James W. Jones, PhD, is a Distinguished Professor in the department of Agricultural and Biological Engineering and Director of the Florida Climate

Institute. As a faculty member at the University of Florida, he has led and participated in many interdisciplinary research programs both nationally and internationally for over 35 years. His research has focused on modeling the effects of climate on crops and on applying those models to study effects of climate variability and climate change on crop yield to evaluate management options that minimize climate risks and support agricultural decision-making. He is author of more than 250 refereed scientific journal articles and teaches graduate courses on mathematical modeling and simulation of biophysical systems. He was recently elected to the National Academy of Engineering for his interdisciplinary research and serves on several international science advisory committees related to climate and agriculture.



## **Marsha Stanton**

**Industry Relations Manager at Monsanto**

As Director of Industry Affairs, Marsha is the key liaison to a number of organizations that represent Monsanto, Monsanto's customers or purchasers of our customer's products in the agri-food system.

She is responsible for outreach with regard to Monsanto's corn products and plays a key role in global acceptance for biotechnology in the agri-food chain.

Marsha joined Monsanto in 1999 as the Global Director of Seed Regulatory Policy. In this role, she provided global leadership, coordination, and expertise on seed regulatory issues and policy direction, including seed

labeling and quality standards, adventitious presence of biotechnology in seed, phytosanitary requirements for import and export of seed, "coexistence", the Biosafety Protocol, and plant breeder's rights.

Marsha holds a masters degree in Agronomy (University of Florida) and a PhD. in plant breeding (University of Arkansas). After completing her graduate work, she served as a Congressional Science Fellow in the office of Senator Bob Kerrey (NE). She continued to work in DC as the DC representative for the Tri-Societies and CAST and later at USDA as the the Commissioner of the Plant Variety Protection Office and the National Program Leader for Plant Breeding and Genetics.



## **Dr. Kirk Hatfield**

**Event Co-Chair, Professor and Director of the Engineering School of Sustainable Infrastructure & Environment**

Dr. Kirk Hatfield is the Director of the Engineering School of Sustainable Infrastructure and Environment at the University

of Florida, the Director of the Florida Water Resources Research Center, member of the Board of Directors of the National Institutes of Water Resources, and a Professor in the Department of Civil and Coastal Engineering. Dr. Hatfield received his BS and MS degrees from the University of Iowa and his PhD degree from the University of Massachusetts in Amherst. Following graduation, he joined the University of Florida, Department of Civil Engineering in 1987.

Dr. Hatfield's ongoing research activities are in the areas of aqueous environmental monitoring, contaminant fate and transport modeling in the subsurface, environmental remediation, and water resources systems analysis. He has active research collaborations with universities and institutes in Russia, Brazil, Canada, Mexico, England, and Germany.