

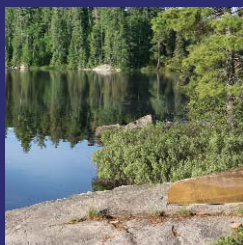
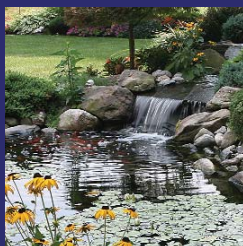


CLIMATE CHANGE & THE PLANT SECTOR: A GROWING INTEREST

November 17-18, 2008
The Grove Park Inn
Asheville, North Carolina

Landscape Architecture – Golf Course Design and Maintenance
Conservation – Horticulture – Gardening – Nursery Management
Arboreta – Botanical Gardens – Public Land Management

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Organized by the
Institute for Global Environmental Strategies
The North Carolina Arboretum Society
University Corporation for Atmospheric Research

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CONFERENCE SCHEDULE

SUNDAY, NOVEMBER 16, 2008

2:00 - 4:30

Tour of The North Carolina Arboretum

3:00 - 5:00

Conference early registration

6:00 - 9:00

Evening Program and Reception

Climate Reference Network Commemorative Event

Peter Backlund, Director, Research Relations,

National Center for Atmospheric Research

(NCAR)

The Grove Park Inn -- Sammons Wing Balcony

MONDAY, NOVEMBER 17, 2008

8:00 **Registration & Continental Breakfast**

9:00 **Welcome and Introductions**

*Thomas R. Karl, Director, National Climatic Data Center,
NOAA*

*George Briggs, Director, The North Carolina Arboretum
Society; President, Centers for Environmental and
Climactic Interaction*

9:10 **Opening Remarks**

*Charles S. Baker, Deputy Assistant Administrator, Satellite
and Information Service, NOAA*

9:20 **Climate Change and its Potential Impact on the Plant
Sector: A Scientific Perspective**

*Richard V. Piacentini, Executive Director, Phipps Botanical
Gardens and Conservatory*

9:45 **Climate Change and its Potential Impact on the Plant
Sector: An Economic Perspective**

*Robert J. Dolibois, CAE, Executive Vice President, American
Nursery and Landscape Association*

10:10 **Climate Change Science: Where are we now?**

*David Eissenstat, Associate Director of Penn State's DOE
National Institute for Climatic Change Research*

10:35 **Break**

10:45 **Emerging Environmental Information Needs:
Identifying the Gaps**

Moderator: *Eileen Shea, Chief, Climate Services and
Monitoring Division, National Climatic
Data Center, NOAA*

Panelists: *Ed Fletcher, Chief Operating Officer,
Botanicals Division, Strategic
Sourcing, Inc. and Chair of the Board
of Trustees for the American Herbal
Products Association*
*Robert Hayter, President, The Hayter Firm;
Past President, North Carolina Chapter of the
American Society of Landscape Architects.*
*Roderick Simmons, Director, Parks, Recreation,
and Cultural Arts Department, City of
Asheville*
*Bruce Williams, President, Agronomy and
Horticulture Services, LLC*

- 12:00 **Networking Lunch**
- 1:30 **Climate's Potential Impact on the Golf Sector**
Thomas A. Marzolf, Senior Design Associate, Fazio Golf Course Designers; Past President, American Society of Golf Course Architects
- 2:00 **Understanding Sector Needs**
 Moderator: *Nancy Colleton, President, Institute for Global Environmental Strategies*
 Panelists: *Sally Benson, Editor, American Nurseryman magazine*
John Crowder, Director, Business Development, ValleyCrest Golf Course Maintenance
David Easterling, Chief of Scientific Services, NOAA
Kelly Gravuer, Lead Botanist, NatureServe
Perry Howard, Professor, North Carolina Agricultural and Technical State University, Fellow and President, American Society of Landscape Architects
- 3:30 **Break**
- 4:30 **Summary**
Margaret Davidson, Director, Coastal Services Center, NOAA
- 5:00 **Adjourn**

TUESDAY, NOVEMBER 18, 2008

- 8:00 **Registration & Continental Breakfast**
- 9:00 **Plans for the Day**
Sharon LeDuc, Deputy Director, National Climatic Data Center, NOAA
- 9:15 **Communicating the Challenges Ahead**
Mary Pat Matheson, Executive Director, Atlanta Botanical Gardens
- 9:40 **Additional Thoughts on Understanding Sector Needs**
Sally Benson, Editor, American Nurseryman magazine
John Crowder, Director, Business Development, ValleyCrest Golf Course Maintenance
Kelly Gravuer, Lead Botanist, NatureServe
- 10:45 **Break**
- 11:00 **Wrap-up Session: Next Steps**
George Briggs, Director, The North Carolina Arboretum Society; President, Centers for Environmental and Climactic Interaction
Eileen Shea, Chief, Climate Services and Monitoring Division, National Climatic Data Center, NOAA
Ahsha Tribble, Chief, Climate Services Division, National Weather Service, NOAA
- 12:00 **Adjourn**
- 2:00 **National Climatic Data Center (NCDC) Tour**

Charles S. Baker

Deputy Assistant Administrator for Satellite &
Information Services
NOAA



Charles Baker was appointed NOAA's Deputy Assistant Administrator for Satellite and Information Services in March 2007. In that capacity, he serves as chief operating officer for NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) managing 850 staff members, a \$1 billion-a-year budget, and 15 satellites. NESDIS is dedicated to providing timely access to global environmental data from satellites and other sources to promote, protect, and enhance the nation's economy, security, environment, and quality of life.

From 2004 to 2007, Mr. Baker served as Chief Financial Officer and Chief Administrative Officer of NESDIS. In that role, he served as the overall business manager for NESDIS, having responsibility for budget, strategic planning, cost estimating, earned value management, human resources, training, facilities, property accounting, and safety. From 1987 to 2004, Mr. Baker worked in the Office of the Under Secretary of Defense (Comptroller), for 13 years as a budget examiner and for four years as Associate Director for Investment, his first position in the Senior Executive Service. As Associate Director, he had oversight of Navy and Air Force research, development, and acquisition budgets totaling nearly \$100 billion per year. He provided leadership to a team of budget examiners who conducted program-by-program budget reviews and recommended budget adjustments to the Deputy Secretary of Defense. Following the events of September 11, 2001, Mr. Baker led the formulation of the investment portions of the emergency budget request.

Mr. Baker began his civil service career with the Department of the Navy in 1974, holding a series of positions in the Naval Sea Systems Command, the Naval Supply Systems Command, the Naval Material Command, and the Office of the Navy Comptroller. His undergraduate degree is from the University of North Carolina at Chapel Hill, with a double major in History and Spanish. Mr. Baker is a member of the Senior Executives Association, the American Meteorological Society, and the American Geophysical Union.

Sally Benson

Editor

American Nurseryman magazine



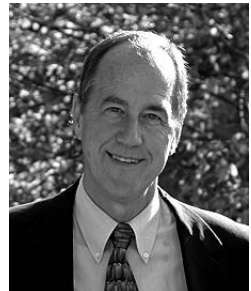
Sally Benson has been the editor of *American Nurseryman* magazine for more than 14 years. The 104-year-old publication serves the US commercial horticulture industry, providing growers, landscapers and independent garden center retailers with the information they need to grow their businesses. Sally also serves as editorial director for American Nurseryman Publishing Company in Chicago, where she directs the operations of the company's book publishing division.

Prior to joining the staff in Chicago, Sally edited *Colorado Green* magazine, the publication of the Associated Landscape Contractors of Colorado.

George Briggs

Executive Director

The North Carolina Arboretum; President, Centers for Environmental and Climatic Interaction (CECI)



As Executive Director for The North Carolina Arboretum of The University of North Carolina since its founding, George Briggs has guided its extraordinary development for 22 years. He organized the 1st World Botanic Gardens Congress in 2000; has served as Chair of the North Carolina Heritage Garden Tourism Task Force; President of the American Association of Botanical Gardens and Arboreta; Trustee of the National Center for Plant Conservation; in advisory capacities for Longwood Gardens, Callaway Gardens, Mars Hill College and Montreat College; and authored the textbook "Indoor Plants" and numerous articles in professional and trade journals.

Currently, he serves on the North Carolina Biotechnology Center's Board of Directors; as Chairman of the Western North Carolina Biotechnology Advisory Committee; Chair of the North Carolina Natural Products Association Inc.; Chair of Bent Creek Institute Inc.; Chair of The Centers for Environmental and Climatic Interaction Inc.; and is on the boards of the Pack Square Conservancy and the North Carolina Plant Conservation program.

He was awarded the 2008 Frank B. Turner Award by the North Carolina State Construction Office and four North Carolina

architecture and engineering groups; was elected into the Council of Fellows of the American Society of Landscape Architects (2007); awarded the American Public Garden Association Service Award (2006); selected for an Honorary Membership in the Garden Club of America (2006); and presented with one of 10 national "Environmental Hero" awards by the National Oceanic and Atmospheric Administration (2006).

Mr. Briggs spent six years as Director of the Nebraska Statewide Arboretum system at the University of Nebraska in Lincoln, following six years as an Assistant Professor of Horticulture at Virginia Tech in Blacksburg. He holds a Master of Landscape Architecture from the University of Virginia, where he was one of four Thomas Jefferson Fellows, and undergraduate degrees in Business Administration and Horticulture from Vanderbilt University and Virginia Tech, respectively.

Nancy Colleton

President

Institute for Global Environmental Strategies

Ms. Nancy Colleton is an internationally known and respected leader in implementing efforts to maximize the awareness, value, and use of Earth observations. As President of the Institute for Global Environmental Strategies (IGES), a non-profit, 501(c)3 organization located in Arlington, Virginia, Ms. Colleton spearheads a wide variety of communication, education, and outreach activities to improve public appreciation of the important role that advancements in space and geospatial technology play in our understanding of and response to global environmental changes, including climate change.



During her 20 years of experience in the areas of space and the environment, Ms. Colleton has worked vigorously with senior-level government and industry executives to call attention to the need for improved observations, monitoring, and delivery of Earth-related information products. Through high-visibility meetings, networking, and congressional testimony, Ms. Colleton has highlighted the need to leverage U.S. investment in Earth observations to focus on the requirements of a growing, diverse, and more-demanding user community. Her committee and board affiliations include: Member of The Strategic Directions for the Geographical Sciences in the Next Decade for the National Research Council; Board Member and Executive Committee Member for the American Astronautical Society; Member of the American Institute of Aeronautics and Astronautics'

International Activities Committee; Member of the Editorial Board for Imaging Notes Magazine; and Member of the United Nations Environment Programme's Global Environmental Outlook Outreach Group.

She is a co-founder of the Alliance for Earth Observations-an informal confederation of industry, academic, and nongovernmental organizations that promotes the private sector's involvement in the development, use, and integration of Earth observations. Established late 2003, the Alliance has emerged as a leading private sector voice and technical resource for improved Earth observations.

John P. Crowder

National Director
Business Development and Marketing
ValleyCrest Golf



Mr. Crowder joined ValleyCrest Golf in September 2004, initially as a consultant charged with development of the company's strategic growth and marketing plan, and became a full-time employee in October 2006. He is responsible for managing the company's overall growth and portfolio development, marketing programs, golf industry visibility and customer relations within the premier properties group.

Previous to ValleyCrest, Mr. Crowder formed BeechTree Golf Company and entered the golf industry where he worked as a project partner and advisor with a number of organizations and companies. Former partners and/or clients include: Dan Maples Design; Softspikes; Dunlop/Slazenger Group Americas; the LPGA; Myrtle Beach Golf Holiday; the National Golf Course Owners Association, Pros Inc. (now Octagon Golf, an IPG company); Holden Productions (golf television production); NBC Sports; Golf Magazine; Tournament Promotions Inc., Wintergreen Resort; the Virginia Department of Tourism; U.S. Kids Golf; and Harmony Products Inc. For three years, he was a partner in "Golf Magazine TV," a nationally syndicated TV show on golf instruction.

Mr. Crowder's professional background also includes five years as a Senior Consultant with the Fails Management Institute, the world's leading construction industry financial consulting firm. Following that he spent 12 years with two regional investment banks, Johnston, Lemon and Co. and Wheat First Securities, specializing initially in private and public corporate finance and later in mergers and

acquisitions. During that time he personally managed or oversaw successful financings and business combinations with collective values exceeding \$750 million.

He received both his B.A. and MBA degrees from Wake Forest University. Mr. Crowder is involved with many professional associations, such as: the National Golf Course Owners Association, the Golf Course Superintendents Association of America, the Carolinas Golf Course Superintendent Association, the Virginia Golf Course Superintendents Association, and the Virginia State Golf Association Foundation. Mr. Crowder is a frequent speaker at golf industry conferences and gatherings, and has written numerous articles and opinion pieces for industry periodicals.

Margaret A. Davidson

Director
Coastal Services Center, NOAA



Since 1996, Margaret A. Davidson has served as the Director of NOAA's Coastal Services Center, a national enterprise established to accelerate access to the science and technology capabilities of NOAA and its partners to improve coastal and ocean resource management as practiced at state and local levels. From August 2000 to October 2002, Margaret also served as the Acting Assistant Administrator of NOAA for Ocean Services and Coastal Zone Management. Before coming to NOAA, Margaret served sixteen years with the South Carolina Sea Grant Consortium, thirteen as the Executive Director. She began her coastal career as an Assistant Attorney General and Special Counsel for the Louisiana Department of Justice.

Ms. Davidson holds a MMA from the University of Rhode Island and a JD from Louisiana State University. She has served in positions of leadership for several national and professional organizations, regularly teaches a graduate level multi-disciplinary course, and is frequently requested to serve as a facilitator and presenter for civic and professional organizations.

Her professional interests include climate and weather variability and its impact on coastal resources, integrated coastal management., and aquaculture and fisheries management. She was a Fulbright Scholar for coastal resource management at Prince of Songkhla University, Thailand in 1992-93.

Robert J. Dolibois, CAE

Executive Vice President
American Nursery & Landscape Association

Robert J. Dolibois is Executive Vice President of the American Nursery & Landscape Association. ANLA is the Washington-based national trade association representing the nursery and landscape industry.



He joined the ANLA staff in 1991 and has been a national trade association executive for 34 years. He is a Past Chairman of the Board of the American Society of Association Executives, a 25,000-member international professional society of association management executives.

Bob currently also serves on the Committee of 100 of the U.S. Chamber of Commerce and is a member of the board of directors of the Small Business Legislative Council in Washington, DC. He volunteers as a member of the Friends of the National Arboretum Board of Directors and the Advisory Council of the Lady Bird Johnson Wildflower Center in Austin ,Texas.

David R. Easterling

Chief
Scientific Services Division,
National Climatic Data Center (NCDC), NOAA

Dr. David R. Easterling is the Chief of Scientific Services Division at the National Climatic Data Center in Asheville, North Carolina. Dr. Easterling received his Ph.D. from the University of North Carolina at Chapel Hill in 1987 and served as an Assistant Professor in the Atmospheric Sciences Program at Indiana University in Bloomington from 1987 to 1990. In 1990, he moved to the National Climatic Data Center as a Research Scientist, was appointed Principal Scientist in 1999, and Chief of Scientific Services in 2002.



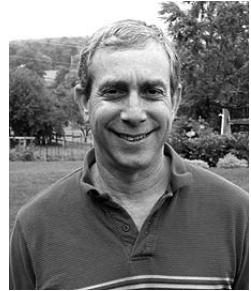
He has authored or co-authored more than 80 research articles on climate change issues in journals such as Science, Nature and the Journal of Climate. Dr. Easterling was a Lead Author for the Nobel Prize-winning Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, a Convening Lead Author for the U.S. Climate Change Science Program Synthesis and Assessment Product

3.3 on Climate Extremes, and was a Contributing Author to the IPCC Second and Third Assessment Reports.

Dr. Easterling is a Fellow of the American Meteorological Society, and his research interests include the detection of climate change in the observed record, particularly changes in extreme climate events and the assessment of climate model simulations for such events.

Dr. David M. Eissenstat

Associate Director
Northeast Regional Center
National Institute for Climatic Change Research



Dr. Eissenstat is the Associate Director of the Northeast Regional Center for the Department of Energy's National Institute for Climatic Change Research, and a Professor of Ecology and Woody Plant Physiology at Penn State University. He is also the Chair of Penn State's Inter-college Graduate Program in Ecology; a scientific advisor to the journals *New Phytologist* and *Tree Physiology*; and has been a panel member for the Ecological & Evolutionary Physiology Program at the National Science Foundation.

Dr. Eissenstat received his B.S. in Agriculture from Cornell University in 1978, his M.S. in Range Science from the University of Idaho in 1980, and his Ph.D. in Range Ecology from Utah State University in 1987. He began his teaching career at the University of Florida as an Assistant Professor of Root Biology. His honors include: the 2008 Howard Taylor Memorial Lecture for the Soil Science Society of America; the 2007 Institute of Advanced Studies' Senior Fellow at the University of Bologna; and he gave the 1993 Tansley Lecture at New Phytologist Trust in York, England.

Edward Fletcher

Chief Operating Officer
Botanical Division, Strategic Sourcing Inc.



Edward Fletcher is the Chief Operating Officer for the Botanical Division of Strategic Sourcing Inc. He works with growers from Chile to Canada and beyond to educate and assist each one in proper cultivation, harvesting, and post-harvest handling techniques for the chosen crop to produce the best possible raw material. He has conducted research on crops to improve their marker constituents including regulated irrigation

deficit, light percentage variances and nutritional input impact studies.

Mr. Fletcher has worked in the horticultural industry for over 33 years. He learned this business through his family's ornamental nursery, Gardens of The Blue Ridge Inc., which was founded in 1892 by his great-grandfather. He concentrated on botany at Lees-McRae College, obtaining an Associate in Science; and then he attended Appalachian State University to earn a degree in Business Management with a minor in Earth Sciences. As the Cultivation Manager for Wilcox Natural Products, he established and developed their cultivation department into what many consider the best in the industry, managing over 2,000 hectares of crops around the world.

Mr. Fletcher is currently as Chairperson for the Board of Trustees of the American Herbal Product Association and the Botanical Raw Materials Committee. He is also on the Advisory Council of the National Center for the Preservation of Medicinal Herbs; the Botanical Advisory Panel Board of United States Pharmacopeia; the Medicinal Plant Working Group; and many others. He has presented at numerous conferences around the world including: Atlanta Botanical Garden Symposium on Medicinal Plants; Indiana Horticultural Conference; the Aromatic and Medicinal Plants Conference; the North American Agroforestry Conference; AHPA's Saw Palmetto Symposium and Echinacea symposiums; the Medicinal Plants Symposium in Chile; the Canadian Embassy's Membership Meeting; the Knowledge Foundation's Natural Products Conference; the American Society of Pharmacognosy & Council for Responsible Nutrition Conference; the IUCN/SSC Conservation Impacts of Commercial Captive Cultivation conference; and the Industrial Leadership for the Preservation of Medicinal and Aromatic Plants conference. He regularly travels to Chile to work with growers; and also presented at the 2nd International Conference on Echinacea in Chile.

Kelly Gravuer

Research Botanist
NatureServe

Kelly Gravuer is Research Botanist at NatureServe, the trusted source for information about endangered species and threatened ecosystems whose mission is to provide the scientific basis for effective conservation. In collaboration with two NatureServe zoologists, she is currently developing a system to assess species' climate



change susceptibility. Kelly also assesses the conservation status of plant species from throughout North America, in addition to projects such as analyzing coverage of plant conservation concerns by State Wildlife Action Plans and determining biodiversity impacts of non-native plants. She has researched the ecology and biogeography of plant invasions in Colorado, Tanzania, and New Zealand, where she was a Fulbright Graduate Student fellow. She is also a graduate of Brown University, where she completed a number of research projects in the field of plant evolutionary genetics and adaptation to different environments.

Robert S. Hayter

Principal

The Hayter Firm



Mr. Hayter is the Principal at The Hayter Firm in Pinehurst, North Carolina. He has worked on numerous conservation-based land use, site and landscape architecture projects throughout the Eastern U.S.; more than 50 retail garden center site and facility designs; and he has worked on projects for Anheuser Busch, the U.S. Open Championship and Clemson University. His education includes an M.A. from North Carolina State University; B.S. from North Carolina State University; and Associate Degrees in Science and Art, and an Associate in Applied Science in Landscape Gardening, from Sandhills Community College. He is also the Resident Landscape Architect for The Homestead Resort in Virginia and the Pinehurst Resort in North Carolina.

Mr. Hayter has contributed to several publications related to master planning and environmental plant use. He has also co-authored "The 1994 Village of Pinehurst Development Code," "The Corridor Overlay Code for Town/County," "The North Carolina Certified Plantsman Manual," and The Guide to Writing and Using Landscape Planting Specifications." He was past President of the North Carolina Chapter of the American Society of Landscape Architects (ASLA) and has been on the board of many associations including The Garden Center Group, New Garden Nursery and Landscape Company, Scenic North Carolina, J.C. Raulston Arboretum, The North Carolina Arboretum, The Moore County Environmental Quality Advisory Board, and the Moore County Chamber of Commerce.

Under his leadership, the Hayter Firm has been recognized with awards such as: the NCLA Grand Award for New Garden Village; ASLA

Merit Awards for the Pinehurst Resort and Holly Inn; the ASLA Honor Award for The Homestead; and American Garden's Superior Award for The Homestead.

Perry Howard

Associate Professor and Coordinator of the Landscape Architecture Program
Department of Natural Resources and Environmental Design
North Carolina A&T State University



Perry Howard is an Associate Professor and Coordinator of the Landscape Architecture Program in the Department of Natural Resources and Environmental Design at North Carolina A&T State University (NCA&TSU), and a Fellow in the American Society of Landscape Architects. His deep involvement in the American Society of Landscape Architects (ASLA) has spanned over 20 years, culminating as ASLA President. Mr. Howard received his Bachelor of Landscape Architecture at Louisiana State University in 1975, and received his Master of Landscape Architecture from Harvard University in June 1982.

In a career that started in 1973, Mr. Howard has worked on a wide variety of projects such as: upgrading a public portion of the Miami airport; the governor's residence in El Morro, Venezuela; the PGA's New Home Site Community; and the Summer Palace for the Saudi Royal Family. Along the way, he has received numerous awards including: Edward D. Stone Jr./Harvard University Scholarship; NASA Goddard Research Fellow as part of the Earth Observing System (EOS) program; the NCA&TSU School of Agriculture and Environmental Sciences Teacher of the Year award; and was one of 100 Harvard University Graduate School of Design, Landscape Architecture Program Distinguished Alumni at the 100-year anniversary. In addition, he has donated his time and skills to countless public service projects.

Dr. Thomas R. Karl

Director
National Climatic Data Center, NOAA

Thomas R. Karl is the Director of NOAA's National Climatic Data Center and is NOAA's Program Manager for Climate Observations and Analysis. Karl received his B.S. in Meteorology in 1973



from Northern Illinois University; his M.S. in Meteorology in 1974 from the University of Wisconsin; and a doctorate of Humane Letters (honoris causa) in 2002 from North Carolina State University for his untiring efforts to increase the scientific community's knowledge of the global climate.

Dr. Karl is author of many climatic atlases and technical reports, and has published over 150 articles in various scientific journals. He was identified as one of the most frequently cited Earth scientists of the 1990s. Dr. Karl has been a Lead Author on many of the Intergovernmental Panel on Climate Change (IPCC) assessments and most recently has served as a Review Editor. He was part of the IPCC organization that received the 2007 Nobel Peace Prize.

Dr. Karl was elected to the status of fellow in the American Meteorological Society and in the American Geophysical Union. He has also been honored as a National Associate of the National Research Council. In 2002, he was elected to serve on the Council of the American Meteorological Society (AMS) and was elected to serve as the 2009 AMS President.

He has received many awards including the prestigious American Meteorological Society's Soumi Award for "leadership to improve the integrity of the climate record and dedication to building a reliable climate observing system." He has received five Department of Commerce's Gold Medals, two NOAA Administrator's Awards, two Department of Commerce's Bronze Medals, the Climate Institute's Scientific Achievement Award, and the Helmut Landsberg Award from the Association of State Climatologists. In 2002, he received a Distinguished Presidential Rank Award.

Sharon LeDuc

Deputy Director
National Climatic Data Center, NOAA

Sharon LeDuc has been the Deputy Director for NOAA's National Climatic Data Center since 2001. She holds a Ph.D. in Statistics from the University of Missouri. Ms. LeDuc has been a part of NOAA since 1974 when she began her career at the then cooperative institute located at the University of Missouri in Columbia. She served as an Associate Editor for the Journal of Applied Meteorology, a consulting editor for Weatherwise magazine, an AMS Chair for Probability and Statistics, a Rapporteur for the World Meteorological Organization (WMO)



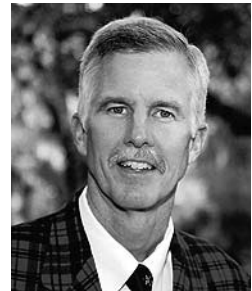
Commission of Climatology, a lecturer for WMO in statistics, and as a delegate at the 10th Commission of Climatology at WMO.

Ms. LeDuc also served on an assignment to the Environmental Protection Agency as part of NOAA's Air Resources Laboratory for 13 years. While there she was Chief of the Climate Branch and managed the tech transfer of third generation air quality models, including model evaluation and graphic/visualization of model output.

She has received numerous awards for her outstanding work including the Department of Commerce Gold Medal, and a Bronze Medal from the Environmental Protection Agency. She has also taught/advised as adjunct at a number of colleges and universities including University of Oklahoma, University of Missouri, William and Mary University, University of North Carolina, North Carolina State University and Duke University. In 1999 she was awarded the Distinguished Alumni Award from her undergraduate alma mater, Eastern Illinois University. Sharon was born in Hattiesburg, Mississippi.

Thomas A. Marzolf

Senior Design Associate
Fazio Golf Course Designers



Mr. Marzolf is the Senior Design Associate for Fazio Golf Course Designers, where he has worked since 1983. His family has been in the golf industry since 1905, and spans four generations. He has been a member of the American Society of Golf Course Architects since 1990, and represented the association as President from 2005 to 2006. In his work, he has contributed to over 50 golf course projects for Tom Fazio. Mr. Marzolf has designed 12 golf courses; renovated another 15 golf courses; been a consulting architect for U.S. Open, U.S. Amateur, U.S. Senior Amateur, PGA and World Tour tournaments; and has even designed a putting green at Vice President Dan Quayle's residence in Washington, D.C.

Mary Pat Matheson

Executive Director
Atlanta Botanical Garden



Mary Pat Matheson is Executive Director of the Atlanta Botanical Garden and directs all operations for the 30-acre urban garden in Midtown, the heart of Atlanta. The Atlanta Botanical Garden was selected WSB-TV Green Champion in March, 2008. She has been named one of 14 Women of Excellence by Business to Business magazine; one of 25 Power Women to Watch by Atlanta Woman magazine; 2005 Professional of the Year by the American Horticultural Society; and the Lexus Leader of the Arts by Public Broadcasting Atlanta. Ms. Matheson was asked to participate in two international advisory committees: chairing the Limbe Botanic Garden Conservation Coalition in Cameroon, and acting as delegate for the U.S China Arts Exchange Southern Gaoligongshan Sustainability Initiative in China.

Prior to joining the Atlanta Botanical Garden in July 2002, Matheson was Executive Director of the Red Butte Garden and Arboretum in Salt Lake City. Originally a horticulturist, Ms. Matheson earned a B.S. in Resource Management and Park Planning, and an Executive Master in Public Administration from the University of Utah. Matheson is past president of the American Association of Public Gardens (formerly the American Association of Botanical Gardens and Arboreta) and continues to serve as a member of its international steering committee focused on the development of a U.S. national strategy for plant conservation in botanical gardens. She is a peer and panel reviewer for the Institute of Museum and Library Sciences.

Locally, she serves on the Board of Directors for the Midtown Alliance, on the Atlanta Convention & Visitors Bureau Cultural Tourism committee, the International Woman's Forum and the Grady Health Care System Board of Visitors. She is a graduate of Leadership Atlanta and member of the Rotary Club of Atlanta. She served as a key volunteer member of the Metropolitan Atlanta Arts and Culture Coalition, handling the task of exploring a regular source of annual funding for the arts group, and is a member of the Piedmont Park Conservancy.

Richard V. Piacentini

Executive Director

Phipps Conservatory and Botanical Gardens



Richard V. Piacentini is executive director of Phipps Conservatory and Botanical Gardens, a position he has held since 1994. As the leader of one of the oldest conservatories in North America, he has worked to improve the Conservatory's collections, educational programs, and overall services to the public. During his tenure, Phipps completed a \$36.6 million and started a \$20 million campaign for the most ambitious expansion projects in its history. This included the first LEED-certified Welcome Center in a public garden and state-of-the-art, energy-efficient Production Greenhouses in 2005. In 2006, Phipps opened the Tropical Forest Conservatory, the most energy-efficient conservatory in the world, and started planning the Center for Sustainable Landscapes, slated to be one of the greenest buildings in the world. Originally from Long Island, New York, Mr. Piacentini received an M.S. in botany from the University of Connecticut, an M.B.A. from Virginia Commonwealth University and a B.S. in pharmacy from the University of Rhode Island. He is past-president and treasurer of the American Public Gardens Association and recipient of their Professional Citation award. He is a board member of the World Water Center in Washington, D.C., and serves on the Steering Committee for Sustainable Pittsburgh's Champions-4-Sustainability. He is the recipient of the 2008 Carnegie Science Environmental award; the 2008 Diamond award from Pittsburgh Business Times; the 2008 Travel & Tourism Advocate of the Year award from VisitPittsburgh; and a 2006 Shades of Green Leadership award from the Green Building Alliance.

Eileen Shea

Chief

Climate Services and Monitoring Division,
National Climatic Data Center, NOAA



Eileen Shea is director of the NOAA Integrated Data and Environmental Applications Center. Her research interests are in climate assessment and forecast applications; environmental science, assessment and public policy; societal applications of climate and global change research; ocean and coastal resource management; and science for sustainable development. Ms. Shea's work addresses climate-related challenges and opportunities in the

Pacific Islands including: extreme events and coastal hazards, water resources, coastal community planning and economic development, and public health and safety. She also explores issues related to sustainable development in the Asia-Pacific region. Previously, Ms. Shea was founder and executive director of the Center for the Applications of Research on the Environment at the Institute of Global Environment and Society in Calverton, Md. She has 18 years of U.S. federal government service at NOAA, including 10 years as deputy director of the NOAA Climate and Global Change Program as well as experience in the NOAA budget, finance and congressional affairs offices. She has a bachelor's degree in marine biology from the University of Delaware and has done master's work in environmental law and marine resource management.

Roderick Simmons

Director
Parks, Recreation & Cultural Arts
City of Asheville



Mr. Simmons is the Director of Parks, Recreation & Cultural Arts for City of Asheville. He received his Bachelor of Science in Recreation Management from Catawba College, and his Master in Public Administration from Central Michigan University. His previous positions include: Director of Recreation for Sampson County; Assistant Director of Athletics for the City of Fayetteville; Recreation Center Director for the City of High Point; and Director of the C.A.R.E.S. Program for the High Point Drug Action Council in High Point, North Carolina.

Mr. Simmons is the Current Treasurer of the North Carolina Recreation and Parks Association. He also is involved with the National Recreation and Parks Association, the North Carolina Recreation and Parks Association (NCRPA), NCRPA Board of Directors, the past NCRPA Procedures Committee Chair, NCPRA Nominations and Elections committee, City/County Administration Program Alumni Board, and a Certified Parks and Recreation Professional. In his career, Mr. Simmons has been awarded the Jack "Swede" Frauson Professional Award and the SCPFC Board Member of the Year.

Dr. Ahsha Tribble

Chief

Climate Services Division,
National Weather Service, NOAA



Dr. Tribble's first post in NOAA was as a student researcher at the National Severe Storms Laboratory in 2000. From there, Dr. Tribble has risen to Chief of the Climate Services Division, the lead organizational unit overseeing National Weather Service climate services, prediction operations plans, policies, and procedures. From 2006 to 2008, Dr. Tribble was selected for the first Executive Officer position established at NOAA's National Hurricane Center in Miami, Florida. She was also designated as the Co-Lead for the NOAA Hurricane Forecast Improvement Project. Prior to that, she served as the Technical Chief of Staff/Senior Science Advisor to the Assistant Secretary of Commerce for Oceans and Atmosphere, the NOAA Deputy Administrator, and the Director of the Climate Change Science Program. During this period, she represented the U.S. on panels at the United Nations Framework Convention on Climate Change and Conference of Parties 9 (Milan) and 10 (Argentina). She also attended regular meetings with the Council on Environmental Quality, Office of Science and Technology Policy, and the Deputy Secretary of Commerce on climate science and policy issues. Dr. Tribble won a NOAA Administrator's Award for her work on NOAA and interagency policy development for the U.S. Climate Change Science Program and her representation of the U.S. in international climate change issues.

She has also supported the NOAA Science Advisory Board while its leadership is under transition, reviewing high-level climate documents and drafting the initial policy language on communicating scientific information. She also participated in the National Academy of Sciences Roundtable on Sustainability. Dr. Tribble is an active member of the American Meteorological Society (AMS), participating in: the AMS Board on Women and Minorities; the sub-committee for the 10-Year Vision for the AMS; and the AMS Summer Policy Colloquium. She is also a member of the American Association for the Advancement of Science, and has served on multiple selection panels for the AAAS Diplomatic Fellows.

Dr. Charles Bruce Williams III

President

Agronomy and Horticulture Services, LLC.



Charles Bruce Williams III (also know as Dr. Bruce) has over 30 years of experience in the green industry as a college instructor, turfgrass specialist, private consultant, and public garden director. He holds a Doctorate in Agronomy and a Master in Horticulture from Auburn University, with an undergraduate degree in Biology from Randolph Macon College. He produced and hosted the long-running weekly 30-minute "DownEast Gardener" TV show and a two-minute information segment, "DownEast Gardener" for 11 years; authored a weekly "DownEast Gardener"/ "Plant Doctor" garden column for over 18 years; and in 2007 he formed his own TV production company and developed a new TV show -- "Grow Your Own with Dr Bruce" is a 30-minute independently produced "magazine-style" garden show that airs throughout North Carolina.

Active in horticulture and turfgrass management consulting, pesticide education, and other aspects of agriculture, he has served two terms as the Associate Editor of HortTechnology Journal, and has authored dozens of scientific articles, technical columns, and garden brochures. He is a Certified Professional Horticulturist by the American Society of Horticultural Science, Certified Plant Professional by the North Carolina Association of Nurserymen, a North Carolina-licensed Pesticide Consultant, and a Certified North Carolina Landscape Contractor Instructor. Dr. Bruce has been awarded the Presidential Silver Volunteer Service Award for his agricultural service to developing countries during the past three years. He is President of the Wilmington Cape Fear Rotary and active in regional native plant preservation efforts.

ORGANIZING COMMITTEE

George Briggs, Executive Director, The North Carolina Arboretum;
President, Centers for Environmental and Climatic Interaction
(CECI)

Judy Carrodeguas, International Relations Specialist, Institute for
Global Environmental Strategies (IGES)

Michael Colgin, Project Assistant, Institute for Global Environmental
Strategies (IGES)

Nancy Colleton, President, Institute for Global Environmental
Strategies (IGES)

Clara Curtis, Director of Design, The North Carolina Arboretum

Margaret Davidson, Director of Coastal Services Center, National
Ocean Service, NOAA

David Easterling, Chief, Scientific Services Division, National Climatic
Data Center (NCDC), NOAA

David Goodrich, Physical Scientist, Office of Oceanic and Atmospheric
Research (OAR), NOAA

Pamela Y. Hughes, Contracting Officer's Representative/Physical
Scientist, National Climatic Data Center (NCDC), NOAA

Thomas R. Karl, Director, National Climatic Data Center (NCDC),
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Sharon Leduc, Deputy Director, National Climatic Data Center
(NCDC), NOAA

Milton Sam McCown, Meteorologist, National Climatic Data Center
(NCDC), NOAA

Robert McGuinn, Landscape Ecologist, Coastal Services Center (CSC),
NOAA

Loretta Quinn, Meeting Planner, University Corporation for
Atmospheric Research (UCAR)

Thomas Ross, CDMP Program Manager, National Climatic Data Center
(NCDC), NOAA

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