



# Adirondack Research Consortium

*Better Information for Better Decisions*

## 19<sup>th</sup> Annual Conference on the Adirondacks

*Entrepreneurship, Sustainability, and the Environment*

**May 16-17, 2012, High Peaks Resort, Lake Placid, NY**

### PROGRAM OVERVIEW

#### Wednesday, May 16, 2012

- 7:30 a.m. Registration, Continental Breakfast, Poster and Exhibit Set-Up (AVALANCHE PASS)
- 8:30 a.m. “Opening Remarks and Introduction”, **Daniel M. Spada**, President, Adirondack Research Consortium (ALGONQUIN/IROQUOIS/WRIGHT)
- 8:45 a.m. **KEYNOTE: Rick Fedrizzi**, President and CEO, U.S. Green Building Council, Washington, D.C. “Leadership in Energy and Environmental Design (LEED) – Challenges for the Future”. Introduced by **Dr. Neil Murphy**, SUNY-ESF.
- 9:30 a.m. **Plenary Panel 1:** “Institutions of Higher Education as Economic Engines for the Community”:  
**Ms. Alice Recore**, President and CEO, Mountain Lake PBS, Moderator  
**Dr. Anthony Collins**, President, Clarkson University  
**Dr. John Mills**, President, Paul Smith’s College  
**Dr. Neil Murphy**, President, SUNY College of Environmental Science and Forestry
- 10:30 a.m. Break (AVALANCHE PASS) Poster Presenters will be available to discuss their research during the break.
- 11:00 a.m. **Plenary Panel 2** – “The Challenges and Innovation of Bringing Alternative and Renewable Technologies to Gridscale Energy Resources”:  
**Echo Cartwright**, National Grid, Moderator  
**Paul DeCotis**, Long Island Power Authority  
**Robert B. Catell**, Chairman, Advanced Energy Research and Technology Center  
**Francis J. Murray, Jr.**, President and CEO, NYSERDA
- 12:15p.m. Lunch: Presentation of 2012 Adirondack Achievement Award to **Dr. Charles T. Driscoll, Jr.**, Syracuse University (**Dining Room on Main Level**)
- Luncheon Speaker: “What’s New at the SyracuseCoE?”, **Dr. Edward A. Bogucz**, Executive Director, Syracuse Center of Excellence



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**2012 Adirondack Achievement Award Luncheon**

May 16<sup>th</sup>, 2012, 12:00 p.m.

(Armstrong/Basin Meeting Rooms – Main Floor)

Presentation of 2012 Adirondack Achievement Award

**Dr. Charles T. Driscoll, Jr.**, Syracuse University

Luncheon Speaker: “What’s New at the SyracuseCoE?”

**Dr. Edward A. Bogucz**, Executive Director, Syracuse Center of Excellence.

Introduced by **Dan Whyte**, Brookfield Renewable Energy Group



Dr. Driscoll is a University Professor of Environmental Systems Engineering and Director of the Center for Environmental Systems Engineering at Syracuse University. His teaching and research interests are in the area of environmental chemistry, biogeochemistry and water quality modeling. He has initiated a number of research projects and used a variety of approaches to study the biogeochemistry of forest, wetland, freshwater and coastal ecosystems, including field investigations, laboratory studies, long-term field measurements, whole-ecosystem manipulation studies, and the development and application of models. He has authored or co-authored more than 350 peer-reviewed articles and has had more than 70 funded research projects. In the Adirondacks, Dr. Driscoll’s work includes studies on the effects of acidic deposition and the transport, transformations, and bioavailability of mercury.

The Adirondack Achievement Award is presented to an exemplar individual or organization that is dedicated to assuring that research is the basis for sound planning, management, and policy decisions which will contribute to improving the quality of life of its residents and the ecological integrity of the Adirondack Park. Past winners include Jerry Jenkins of the Wildlife Conservation Society and Dr. Dudley Raynal of SUNY College of Environmental Science and Forestry.

Dr. Edward Bogucz is the Executive Director of the Syracuse Center of Excellence. His expertise is computational fluid dynamics and heat transfer, multidisciplinary analysis and design, engineering education, regional innovation clusters. Ed holds a PhD in Mechanical Engineering from Lehigh University, MSc Heat Transfer Engineering from Imperial College, University of London, and a BS Mechanical Engineering, Lehigh University. His special interests include opportunities to combine art, education, technology, history and diverse cultures to revitalize urban neighborhoods and efforts to reopen the Erie Canal through downtown Syracuse. The mission of SyracuseCoE is to create innovations in environmental and energy technologies that improve human health and productivity, security, and sustainability in urban and built environments.



1:30 p.m. Concurrent Sessions 2 – (Please Choose One):

CONCURRENT SESSIONS	1.1 Lakeside	Green Smoke and Solar Mirrors: Has Sustainability Reached Its Full Potential?	Moderator: <b>Joe Visalli</b> , Adirondack Research Consortium <b>Ross Whaley</b> , Adirondack Landowners Association, Historical Perspectives <b>Bill Vitek</b> , Clarkson University, Sustainability & Innovation <b>Louise Gava</b> , St. Lawrence University, Sustainable university? <b>Eric Holmlund</b> , Paul Smith’s College, Individual Focus & Activism
	1.2 Algonquin	Mapping the Future of the Adirondack Park Project The Adirondack Park 25 Years From Now	Moderator: <b>Jim McKenna</b> , Regional Office of Sustainable Tourism <b>Dave Mason</b> and <b>Jim Herman</b> , ADK Futures Project
	1.3 Iroquois	Student Juried Paper Program – Undergraduate (See Insert)	<i>Sponsored by the Pearsall Adirondack Foundation</i>
	1.4 Wright	Forest Products Industry Update and Bio Heat	Moderator: <b>Eric Carlson</b> , Introduction <b>Pat Curran</b> , Curran Renewable Energy; Wood Pellets and Pneumatic Delivery <b>Stephanie Ratcliffe</b> and <b>Dave St. Onge</b> , The Wild Center; High-Efficiency Pellet Boiler Demonstration <b>Michael Kelleher</b> , SUNY Environmental Science and Forestry and <b>Scott Larson</b> , NYSERDA; Pellet-fired Combined Heat and Power at SUNY ESF’s Gateway Building <b>Nate Russell</b> , NYSERDA; New High-efficiency Pellet Heating Demonstrations

2:45 p.m. Break – (AVALANCHE PASS) Poster Presenters will be available to discuss their research during the break.

3:15 p.m. Concurrent Sessions 2 – (Please Choose One):

CONCURRENT SESSIONS	2.1 Lakeside	Entrepreneurship : Business Assistance, Training and Private Capital  <i>(Note: This session will run 1.5 hours)</i>	Moderator: <b>Joe Visalli</b> , ARC Board Member and ENYA Member <b>Ryan Busch</b> , University of Albany Small Enterprise and Economic Development Program <b>Marc Campeau</b> , Clarkson University Reh Center for Entrepreneurship <b>Jesse Tomczak</b> , Director of Commercial Sales, State Employees Federal Credit Union (SEFCU) <b>Joe Visalli</b> , Eastern New York Angel Fund
	2.2 Algonquin	Approaches to Understanding Ecosystems from Lake Bottom to Mountain Top	Moderator: <b>Daniel Spada</b> , Adirondack Park Agency <b>Kristina Arseneau</b> , Queen’s University, Using Paleolimnological Methods to Understand the Impact of Climate Change <b>Cassandra Cummings</b> , Queen’s University, Climate-Related Changes in Adirondack Reference Lakes <b>Julia Goren</b> , Adirondack Mountain Club, Using Photopoint Monitoring to Document Changes in Alpine Vegetation
	2.3 Iroquois	Student Juried Paper Program – Graduate (See Insert)	<i>Sponsored by the Pearsall Adirondack Foundation</i>
	2.4 Wright	Aquatic Research	Moderator: <b>Amanda Lavigne</b> <b>Nina Schoch</b> , BRI’s ADK Center for Loon Conservation, Mercury Pollution in Adirondack Aquatic Ecosystems <b>Celia Evans</b> , Paul Smith’s College, Apical Dominance in Eurasian Watermilfoil <b>Amanda Lavigne</b> , St. Lawrence University, Low Head Hydro and Grass Energy Research

4:30 p.m. Adjourn, Reception (Cash Bar with hor`deurves served) (OUTDOORS AT DANCING BEARS)

**Thursday, May 17, 2012**

7:30 a.m. Continental Breakfast

8:30 a.m. 2012 Adirondack Research Consortium’s Annual Meeting and Elections  
(ALGONQUIN/IROQUOIS/WRIGHT)

- President’s Report
- Election of Board of Directors
- Membership Comments

9:00 a.m. **Plenary Panel 3** – “Updates on Climate Change and Presenting Nature”  
**Raymond P. Curran**, Adirondack Sustainable Communities, Inc., Moderator  
**David Wolfe**, Cornell University, The NYSERDA ClimAid Report  
**Curt Stager**, Paul Smith’s College, “Biotic Responses to Climate Change in the North Country”  
**Colin Beier**, SUNY ESF, Findings of Climate Change Research in the Adirondacks  
**Jerry Jenkins**, Wildlife Conservation Society, “Reinventing the Field Guide: The Northern Forest Atlas Project”

10:30 a.m. Break

11:00 a.m. Concurrent Sessions 3 – (Please Choose One):

CONCURRENT SESSIONS	3.1 Lakeside	Regional Sustainability Planning: The Trail to Economic Opportunity	Moderator, <b>Chris Rohner</b> , Ecology and Environment, Inc. <b>Kate Fish</b> , ANCA <b>Sue Montgomery-Corey</b> , Community Power Network of NYS TBD: Local Case Study Speaker
	3.2 Algonquin	Adirondack Youth Climate Summit	Moderator, <b>Jen Kretser</b> , Director of Programs, The Wild Center <b>Tammy Morgan</b> , Teacher Lake Placid Central School <b>Tom Dodd</b> , Teacher, Lake Placid Central School <b>Kate Glenn</b> , Sustainability Coordinator, Paul Smiths College
	3.3 Iroquois	Adirondack Ecosystem Research	Moderator, <b>Mark Watson</b> , NYSERDA, <b>Karen Roy</b> , ALSC, Fish Species Diversity <b>Greg Lawrence</b> , Cornell University, Sugar Maple Research <b>Charlie Driscoll</b> , Syracuse University, Lake Chemistry and Critical Loads
	3.4 Wright	Land Use Management in the Adirondacks	Moderator: <b>Daniel Spada</b> , Adirondack Park Agency <b>Carrie Tuttle</b> , Clarkson University, An Economic Analysis of Land Use in the Adirondacks <b>Ed Kanze</b> , Moose Hill Farm, Biological Survey Report
	3.5 Board Room	Updates on the Adirondack Information Trust	<b>Greg Lawrence</b> , Cornell University, Adirondack Information Trust

12:15 p.m. Lunch – Invited Speaker

2012 Juried Student Paper Recognition, *Sponsored by the Pearsall Adirondack Foundation*

1:45 p.m. Concurrent Sessions 4 – (Please Choose One):

CONCURRENT SESSIONS	4.1 Lakeside	<p>Creating Resilient Communities: A “World Cafe” Facilitated Discussion that Addresses Community-Scaled Barriers</p> <p><i>Solutions to the core issues that create barriers to creating more sustainable and resilient communities in the North Country.</i></p>	Moderator: <b>Rebecca Flora</b> , Ecology and Environment
	4.2 Algonqui	Shingle Shanty Preserve	Moderator, <b>Steve Langdon</b> , Shingle Shanty Preserve
	4.3 Iroquois	<p>Update on the Paul Smith’s College VIC and the SUNY ESF’s Adirondack Interpretive Center</p>	<p>Moderator: <b>Paul Hai</b>  <b>Paul Hai</b>, SUNY ESF, Adirondack Interpretive Center  <b>Kristin Pasquino</b>, SUNY ESF, Jr. Naturalist Internships at the AIC  <b>Brian McDonnell</b>, Paul Smith’s College VIC  <b>Bob Lilly</b>, Adirondack Park Institute, Inc.</p>
	4.4 Wright	Trends in Land Values and Communities	<p>Moderator: <b>Daniel Spada</b>, Adirondack Park Agency  <b>Martin Heintzleman</b>, Clarkson University, Understanding the Impacts of Water Quality on Land Value  <b>Andrea Armstong</b>, Utah State University, Second Home Ownership in the Southern Adirondacks: Trends and Potential  <b>Erik Backlund</b>, St. Lawrence University, Tourism, Amenities and Community Prosperity in the Adirondacks</p>

3:00 p.m. Adjourn

**Poster Presentations - *Displayed Throughout Conference*, (AVALANCHE PASS) Meet the poster authors at the morning and afternoon breaks on Wednesday, May 16, 2012.**

**POSTER Presentations:**

**Dukett, Houck, Snyder, and Capone**, Adirondack Lakes Survey Corporation, Where Timely Environmental Monitoring Data Reaches the Public.

**Daby, Lendza, Relyea, and Steinberg**, North Country Community College, The Adirondack Club and Resort: Common Interests Through an Interdisciplinary Approach.

**Kristin Pasquino**, SUNY ESF, Junior Naturalist Internships at the Adirondack Interpretive Center in Newcomb for high school and college students.

**Law, Miller, Schorer, Sullivan, Taylor, Young, Whyte, and Steinberg**, North Country Community College, Aquatic Invertebrates, Water Quality, and Soil Characteristics – Chubb River and Farrington Brook

**UPCOMING EVENT – MARK YOUR CALANDERS**

Alternative Onsite Wastewater Treatment Training  
*Onsite Wastewater Options for Small Rural Communities in the Adirondacks*  
 October 10, 2012, The View – Old Forge, New York

NYS DOS continuing education credits have been approved for this training.



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**FEATURED SPEAKERS**  
(In order of appearance)



**Rick Fedrizzi**, founding chair of the U.S. Green Building Council (USGBC) in 1993, was appointed President & CEO of the rapidly growing organization in April 2004. Under his leadership, USGBC has undertaken a far-reaching agenda that has tripled its membership, broadened its influence, and cemented its role as a leadership voice in the global sustainability movement. A cornerstone of that agenda has been USGBC's internationally recognized LEED green building certification program. The growth of LEED has led to more than 151,000 individuals earning either the LEED AP or LEED Green Associate professional credential.

Clarkson University President **Anthony G. Collins** is a regional and national advocate for higher education - industrial partnerships that couple research discovery and engineering innovation with enterprise for commercialization and economic development. With a focus on advancing sustainable energy solutions and environmental technology innovation, he serves as the president of the Seaway Private Equity Corporation that invests in new technology companies based in St. Lawrence County, New York and on the board for (TSEC) The Solar Energy Consortium which mobilizes related resources in New York State. Dr. Collins was among the primary architects of the *Vision of a Clarkson Education* that has guided evolution of the curriculum since 1995.



**Cornelius B. Murphy Jr.**, has been the President, State University of New York College of Environmental Science and Forestry since May 2000. As the president of SUNY ESF, Murphy has played a pivotal role in fostering green initiatives at the heart of the institution. Leading by example, the campus' physical infrastructure reflects a passion and commitment to be an economically responsible member of a global society that is evolving to use more friendly practices and resources. The college has also made a commitment to be carbon-neutral by the year 2015. Prior to being President of SUNY-ESF, Neil held various positions at O'Brien & Gere, a global consulting firm based in Syracuse, starting out as a Laboratory Technician in June 1970 and working his way up to President in 1993 and Chairman of the Board in 1998. He was the driving force in establishing the company as a dominant player in hazardous waste management and remediation, transforming O'Brien & Gere from a local to an international firm.



**John W. Mills** is the ninth president of Paul Smith’s College, a four year private college located in the Adirondack Mountains of New York State which currently enrolls 875 students in three divisions: Forestry/Natural Resources/Recreation, Hospitality/ Resort and Culinary Management, and Science/ Liberal Arts/Business. The College was established in 1937 as a co-educational institution honoring Apollos and Lydia Martin Smith, who operated a hotel on the shores of Lower St. Regis Lake in the late 1800’s where the College is located today. Under President Mills’ leadership, Paul Smith’s College has continued the successful transition to a four-year college granting baccalaureate degrees in both arts and sciences. Over seventy percent (70%) of the current students are enrolled in baccalaureate programs but associate degrees are still offered in some programs.

**Alice Recore** has served as the President and CEO of Mountain Lake PBS since 2003. Alice has worked in the not-for-profit sector for the majority of career. Before coming to Mountain Lake PBS in 1997, she served as the Business Manager and Acting Executive Director of Hospice of the North Country. A member of the CVPH Medical Center Board since 2009 Alice is currently serving as Treasurer. Alice also serves as Chair of the New York Association of Public Broadcasting, is an active board member for Adirondack North Country Association (ANCA) and also is a member of the Board and Finance Committee for the National Education Television Association (NETA).



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**Robert B. Catell** is currently the Chairman of the Advanced Energy Research and Technology Center (AERTC) at New York State University at Stony Brook, and Chairman, New York State Smart Grid Consortium. Mr. Catell was formerly the Chairman and Chief Executive Officer of KeySpan Corporation and KeySpan Energy Delivery, the former Brooklyn Union. His career with Brooklyn Union started in 1958. He became Chairman, National Grid, U.S., following the acquisition, by National Grid, of KeySpan Corporation. Mr. Catell is Chairman of Alberta Northeast Gas Ltd., and a member of the board of directors of KEYERA Energy Management Ltd. He is also the Chair of New York State Foundation for Science, Technology and Innovation (NYSTAR). Mr. Catell serves on numerous boards including New York State Energy Research & Development Authority (NYSERDA)

**Francis J. Murray, Jr.**, was appointed President and Chief Executive Officer of the New York State Energy Research and Development Authority (NYSERDA) on January 26, 2009. Prior to his appointment, Mr. Murray served as Senior Advisor at the international environmental consulting firm Ecology and Environment, Inc. From 1996 to 1997, Mr. Murray was policy advisor to the United States Secretary of Energy, assisting in the development of the Clinton Administration’s national energy policy. Mr. Murray served from 1992 to 1994 as the New York State Commissioner of Energy and Chairman of the NYSEERDA Board of Directors. In 1985, Mr. Murray was appointed Deputy Secretary to the Governor for Energy and the Environment, a position he held until 1992. He served from 1983 to 1985 as Assistant Secretary for Energy and the Environment in the administration of New York State Governor Mario M. Cuomo.





**Paul DeCotis** is Vice President of Power Markets at Long Island Power Authority where he oversees strategic resource planning; fuel, energy and capacity purchases and sales; power project development and management; and participation in the region's wholesale power markets. Prior to this Paul was Deputy Secretary for Energy in New York, serving as senior energy advisor to Governor Spitzer and Governor Paterson. Paul was also Chair of the State Energy Planning Board. Paul previously served as Director of Energy Analysis for the New York State Energy Research and Development Authority where he oversaw corporate strategy and planning, forecasting and analysis, and energy program evaluation. Prior to this, Paul was Chief of Policy at the State Energy Office. Until his appointment as Deputy Secretary, Paul was President of a management consulting business, specializing in

executive and Board development, strategy, and mediation. Since 1985, he has served as an adjunct faculty member at several colleges and universities including Cornell University, Rochester Institute of Technology, and Sage Graduate School.

**Echo Cartwright** is Vice President of Government Relations for National Grid NY, overseeing and advising on statewide communications and implementation of strategic energy policy initiatives with government officials. Previously, Ms. Cartwright served as the Senior Manager of Consumer and Government Relations at the New York Independent System Operator (NYISO). Ms. Cartwright also served as the Assistant Secretary for Renewable Energy and energy advisor to New York Governor David A. Paterson, where she chaired the Governor's Renewable Energy Task Force, served as Deputy Director to the State Energy Planning Board, Co-Chaired the Great Lakes Wind Collaborative Steering Committee, and developed statewide policy pertaining to the deployment of renewable energy technologies.



**David Wolfe** is a professor of plant ecology in the Department of Horticulture at Cornell University. He is a leading authority on the effects of climate change and rising atmospheric carbon dioxide on plants, soils and ecosystems. He is currently working with the Union of Concerned Scientists and a team of experts in the Northeast on a regional climate change impacts assessment. His research interests and expertise include: climate change adaptation and mitigation for managed and natural ecosystems; plant stress physiology; soil ecology; and nitrogen and water management for farms and gardens. David is a Faculty Fellow with the Atkinson Center for a Sustainable Future (ACSF) and chair the ACSF Climate Change Focus Group. His science communication efforts include: news media interviews; policy-briefings; formal Extension programs for farmers and the general public; and writing for the popular press, such as his soil ecology book for general audiences, "Tales From the Underground: A Natural History of Subterranean Life."





Since 1997, **Curt Stager** has been a professor at Paul Smith's College where his research interests include lake ecology, climate change, biology, geology, evolution, paleoecology, and science journalism. His latest book, "Deep Future: The Next 100,000 Years of Life On Earth," was published in March of 2011. Stager also holds a research associate post at the University of Maine's Climate Change Institute. Curt is an ecologist, paleoclimatologist, and science journalist who has written extensively for general audiences in periodicals such as National Geographic and Adirondack Life. Curt has taught marine ecology in the Caribbean, North Carolina, and Maine,

and taught geology, biology, and evolution in upstate New York and paleolimnology in Tanzania.

**Colin Beier** joined the staff of SUNY ESF's Adirondack Ecological Center in Newcomb, NY August 2007. Colin recently completed a Ph.D. at the University Alaska-Fairbanks focused on ecological, economic and political aspects of management in the Tongass National Forest in southeastern Alaska, with studies from climate change impacts on temperate rainforests, to the outcomes of the conservation debate for both ecosystems and human communities, to the rise of industrial timber in Alaska. At the AEC he focuses his research on climate forest management and conservation, ecological economics, renewable energy, sustainability in the Adirondacks and Northern Forest.



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**Jerry Jenkins** is an ecologist with the Wildlife Conservation Society Adirondack Program. He is the author of "Climate Change in the Adirondacks: The Path to Sustainability," a newly-released book on the local implications of climate change, published through Cornell University Press. Jenkins brings decades of research experience in the field and the library to his current projects. In addition to focusing on energy and climate, his work has included botanical and ecological inventories, research on sugar maple regeneration and acid rain, and a focus on the ecological value of conservation easements. Jenkins is the lead author of several comprehensive books on the Adirondack region, including "The Adirondack Atlas: A Geographic Portrait of the Adirondack Park," coauthored by Andy Keal, and published as a project of the Wildlife Conservation Society in 2004.

**Raymond P. Curran** is a professional ecologist, having worked for the NYS Adirondack Park Agency as head of the science unit for 31 years before entering the private sector in 2004. A graduate of SUNY ESF, he led several significant initiatives at the APA including securing federal funding to begin a project to digitize resource information in all the Adirondack Park's major watersheds, a project which received national recognition. Ray is currently an advisor to Adirondack Sustainable Communities, Inc., a not-for-profit dedicated to building community awareness of the links between the environment and local economies, developing interpretive tools, and promoting better community participation in Park conservation efforts. Mr. Curran has collaborated on several community initiatives including the development of interpretive trail systems in Star Lake and "Henry's Woods" - a trail system on the Uihlein property in Lake Placid.

