



CASE STUDIES

ARTS & CULTURE: EXPERIMENTAL FORESTS & ART/SCIENCE COLLABORATIONS

STRATEGIES AND SOLUTIONS FOR A MORE RESILIENT, CARING, INCLUSIVE ECONOMY THAT CAN WITHSTAND, ADAPT, INNOVATE, AND TRANSFORM IN THE FACE OF NATURAL AND HUMAN DISASTERS.

WHAT TO EXPECT FROM THESE CASE STUDIES

This is a collection of case studies for partnerships and collaborations between the arts, science and environmental industries. During focus group conversations with the arts and culture industry in the North Country, participants expressed an interest in finding ways to collaborate with scientists and environmental organizations to share the story of the region’s natural history and the importance of the natural environment. This case study will share examples of experimental forest art programs around the U.S. and how other communities have decided to help cultivate the relationship between artists and scientists to tell the stories of natural history.

Examples Of



Experimental Forests

Art-Science Collaborations



TO LEARN MORE...



ECOLOGICAL REFLECTIONS

*Long Term Collaborative Inquiry
Arts, Humanities, & Sciences*

| MISSION & VISION

THE MISSION OF ECOLOGICAL REFLECTIONS IS TO BRING THE ENVIRONMENTAL SCIENCES, ARTS, AND HUMANITIES TOGETHER IN LONG-TERM ATTENTION TO PLACES AND THEIR CULTURAL AND MORAL MEANINGS, AS THESE CHANGE OVER TIME AND GENERATIONS.

ABOUT THE PROGRAM:

Long-Term Ecological Reflection Sites are established and created under the umbrella organizations called Ecological Reflections. They are the network/collaboration of Spring Creek Project, Hubbard Brook Experimental Forest and H.J. Andrews Experimental Forest. The Long-Term Ecological Reflection Sites (LTER) program was designed to support a multidisciplinary approach to addressing long-term questions in a wide variety of biomes in North America and Beyond. Scientists and artists have also expressed a mutual benefit to working alongside each other. Time and again, immersion in one of these sites has shaped the trajectory of an artist's or writer's work. Scientists report asking new questions, seeing their research sites in new ways, and being invigorated by the public outreach potential advanced by working with artists and writers.

5 GENERAL CORE RESEARCH AREAS OF LTER PROGRAMS

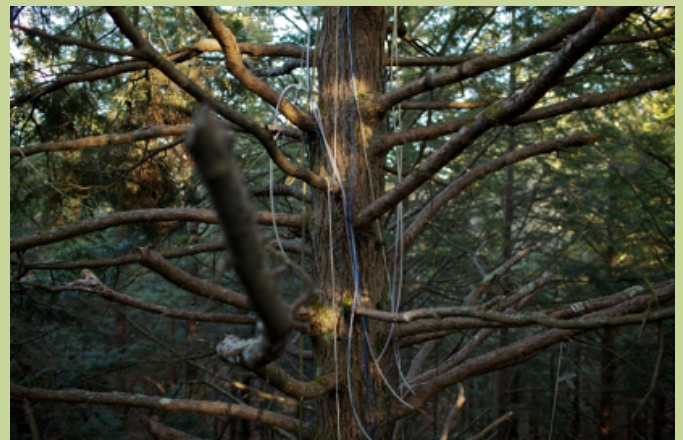
1. Patterns and controls of Primary production
2. Spatial and temporal dynamics of key populations
3. patterns and control of organic matter accumulation in surface layers and sediments
4. patterns of inorganic input and movements through soils, groundwater, and surface water
5. patterns and frequency of disturbances to the system

ARTISTS IN RESIDENCIES WORK:



"Vanishing Act" - Mindy Schnell Drawing

The school of walleyes fades as the rainbow smelt increase. The rainbow smelt is jeopardizing prized game fish in our north wood's lakes. This drawing created by Mindy Schnell allows visualization of life below the surface and asks the viewer to enter a realm where abstract thought, imagination, and vision meld with the scientific world.



"Carbon Exchange" - John Hirsch Photo

John Hirsch's portfolio of his "And Again 2009-2012" exhibit based at Harvard Forest seeks to find a balance between description and intervention. This work is about a desire to understand, describe and predict the evolutions of our surroundings while showing reverence for the possibility of sublime moments in a place.

TO LEARN MORE...



SCAN ME

"Poetic Science"

ARTISTIC-SCIENTIFIC APPROACHES
TO EL YUNQUE NATIONAL FOREST

| MISSION & VISION

THROUGH THIS ARTS AND SCIENCE COLLABORATION THE MUSEUM OF CONTEMPORARY ART OF PUERTO RICO HAS DISCOVERED THAT THERE ARE MANY DIFFERENT PATHWAYS TO ENGAGE PEOPLE IN SCIENCE, INDEPENDENT OF AGE OR EDUCATIONAL STATUS – THIS REALIZATION HAS ALLOWED A BETTER UNDERSTANDING IN HOW TO TRANSLATE THE RESEARCH SCIENTISTS HAVE DONE BACK INTO GENERAL SOCIETY. THUS, ALLOWING THIS COLLABORATION A EASIER ENVISION A TRILATERAL FRAMEWORK FOR OUTREACH EFFORTS ANCHORED ON ARTS, SCIENCE, AND EDUCATION.

ABOUT THE PROGRAM:

"Poetic Science" is a interdisciplinary project created by Museum of Contemporary Art of Puerto Rico (MAC) and in partnership with the International Institute of Tropical Forestry (IITF) of the U.S. Forest Service. It unites science and art to celebrate the earth, the resources it provides, and the resources protected under the Wilderness Act, created in 1964 to establish the National Wilderness Preservation System. The project began in March 2013 with artist residency at El Yunque National Forest, organized in conjunction with Aldo Leopold Wilderness Research Institute and Colorado Art Ranch. It was the first in series of collaborations carried out in six different ecosystems in the united states.

"IN ADDITION TO REVIEWING THE RELATIONSHIP BETWEEN ART AND SCIENCE, ONE OF THE GOALS OF THIS PROJECT IS PRECISELY THE AWARENESS AND TRANSFORMATION OF MENTALITIES USING ART AS A RESOURCE."

- Marianne Ramirez-Aponte, Executive Director of the M.A.C.

HOW IT WORKS:

"Poetic Science" Includes works made in various media such as installation, video, performance, and sculpture. It also presents the research projects of the scientists, including the introduction of sound art, the creation of maps and the establishment in one of the MAC galleries of a weather station with which the length of the waves can be measured. The educational offer worked includes both activities for the curricular integration of art and science aimed at teachers and the school and university community.



TO LEARN
MORE...



SCAN ME

Art & Science Collaborations Inc.

"Order to Chaos"
Painting by
Caroline Ometz

| MISSION & VISION

ASCI IS AN INTERNATIONAL NONPROFIT ORGANIZATION DEVOTED TO INCREASING THE VISIBILITY OF ART-SCI WORK THAT IS INSPIRED BY OR USES SCIENCE AND/OR TECHNOLOGY TO CREATE NEW FORMS OF EXPRESSION AND TO INCREASE DIALOGUE AND COLLABORATIONS BETWEEN THE FIELDS OF ART AND SCIENCE.

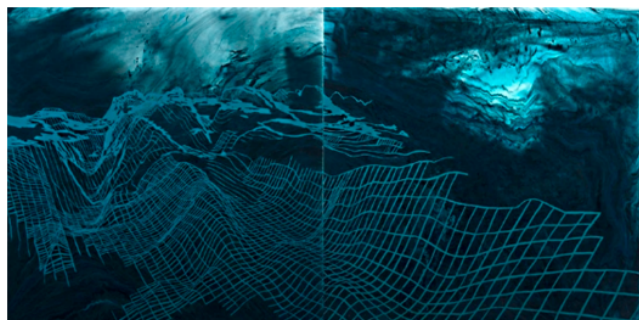
ABOUT THE PROGRAM:

Art and Science Collaborations Inc was established to create exhibits and allow artists to put passion behind the work when it comes to sending a message or creating meaning around what we are seeing happen to the climate around us. The exhibits are there to bring awareness to nature and science and allow individuals to explore those intertwining mediums. ASCI offers a reliable exhibition service, monthly newsletter, and extensive website archives to those interested in the international field of art-science. We are one of the first art-sci-tech member organizations in the US. Established primarily as a network for artists who either use or are inspired by science and technology. The purpose of this work is to raise public awareness about artists and scientists using science and technology to explore new forms of creative expression and increase dialogue between the fields.

"BASED ON NEW SCIENTIFIC INFORMATION AND PERSONAL EXPERIENCES, THE INTERNATIONAL OPEN CALL FOR THIS EXHIBITION ASKED ARTISTS AND SCIENTISTS TO HELP CREATE A NEW PUBLIC PERCEPTION OF OCEAN BY SHARING CREATIVE VISIONS OF OUR DEEP CONNECTIONS TO HER, THE HEALTH ISSUES SHE FACES AND/OR POSSIBLE SOLUTIONS, AND FEELINGS SHE INSPIRES IN US."

-CYNTHIA PANNUCCI, ASCI FOUNDER-DIRECTOR

EXHIBITION WORK:



-REBECCA RUTSTEIN
HER ART SHARES THE IMPORTANCE OF SEAFLOOR MAPPING OCEAN EXPLORATION AND ENIGMATIC BEAUTY OF THESE HIDDEN LANDSCAPES.



-LYUBAVA FARTUSHENKO
WATERCOLOR, PLASTIC OCEAN (ORCA) IS PART OF A SERIES THAT FOCUS ON ENDANGERED SPECIES, INCLUDING THE VULNERABLE ORCAS.

-DANIELLE BAUDRAND
THE PLASTIC BAG PROJECT IS A INSTALLATION OF OVER 6,000 PLASTIC BAGS AND PACKAGING BRAIDED AND CROCHETED OVER A FOUR-YEAR PERIOD.





TO LEARN
MORE...



SCAN ME

HJ Andrews Experimental Forest

LONG-TERM ECOLOGICAL RESEARCH
ORGON STATE UNIVERSITY

| MISSION & VISION

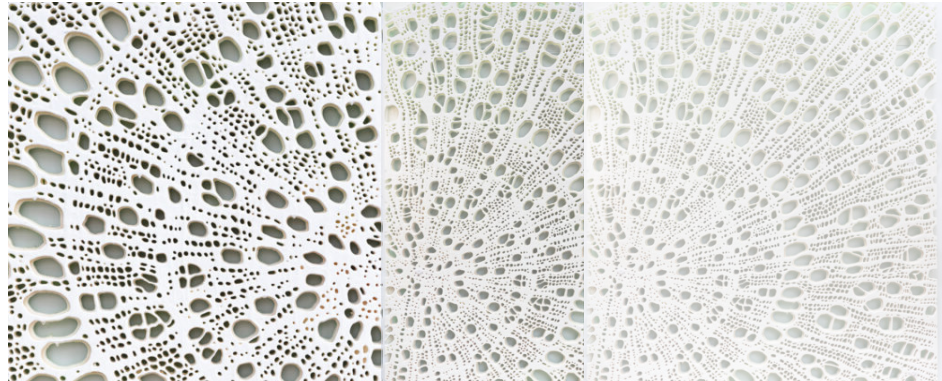
OUR MISSION IS TO SUPPORT RESEARCH ON FORESTS, STREAMS, WATERSHEDS, AND TO FOSTER STRONG COLLABORATION AMONG ECOSYSTEM SCIENCE, EDUCATION, NATURAL RESOURCE MANAGEMENT, AND THE HUMANITIES.

ABOUT THE PROGRAM:

First established in 1948 as a US Forest Service Experimental Forest, in 1980 the Andrews Forest became a charter member of the National Science Foundation's long term ecological research program. This group is comprised of ecosystem scientists, educators, natural resource managers, writers, artists, musicians, and photographers. The Forest is administered cooperatively by the USDA Forest Services Pacific Northwest Research Station, Oregon State University, and the Willamette National Forest. When the USFS established the HJ Andrews Experimental Forest it was a mix of old-growth and mature forest. Beginning in the 1950s, several small watersheds were manipulated to lay foundation for research on how the ecosystem works, how plants regrow in the forest, how nutrients move through the system, and how the forest and streams interact.

HOW IT WORKS:

- Apply to be a writer or in-residence
- Attend a writer gathering
- Explore the Forest Log
- View art at HJ Andrews Forest
- Learn about the national Ecological Reflections Network



LISTENING TO THE FOREST (PUBLIC ART)

-LEAH WILSON

THIS IS AN HJ ANDREWS FOREST EXHIBIT FROM OREGON STATE UNIVERSITY & GEORGE W. PEAVY FOREST SCIENCE CENTER



Art - Science Program

WMNF | NEW HAMPSHIRE

| MISSION & VISION

HUBBARD BROOK'S BURGEONING ART-SCIENCE PROGRAM PROVIDES AN OPPORTUNITY FOR ARTISTS AND SCIENTISTS TO COME TOGETHER IN AUTHENTIC WORKING RELATIONSHIPS TO BETTER UNDERSTAND THE NORTHERN FOREST ECOSYSTEMS AND SHARE THAT KNOWLEDGE WITH A BROADER AUDIENCE.

ABOUT THE PROGRAM:

The Hubbard Brook Ecosystem Study, founded in 1963 by G.E. Likens, F.H. Bormann, R.S. Pierce, and N.M. Johnson, is among the longest running and most comprehensive ecosystem studies in the world. Since the establishment of the 7,800-acre Hubbard Brook Experimental Forest in the White Mountains of NH by the USDA forest service in 1955, researchers have used the site to study the hydrology, ecology, and management of the northern forests. Hubbard Brook is a part of the Long-Term Ecological Research (LTER) Network as well, collaborating with sites across the continental US, Alaska, Antarctica, and islands in the caribbean and the pacific. The program is built on the premise that human societies in the 21st century are facing increasingly complex and inter-related social and ecological problems, like climate change, that require interdisciplinary cooperation. The Hubbard Brook Art-Science program brings artists and scientists together to:

- Interpret and translate science on northern forest ecosystems for a broader audience.
- Understand pattern and process in increasingly large and complex scientific datasets.
- Foster new discoveries.

HOW IT WORKS:

Hubbard Brook offers residency programs in support of creative collaborations, with housing provided on the mirror lake campus. They encourage projects that forge authentic connections between art and science and look to encourage long-term, place-based relationships between art and science as well as long-term relationships between the artist and Hubbard Brook.

Artist Spotlight

NIKKI LINDT

Brooklyn-based ecological artist who has exhibited and presented her work nationally. This project is a series on the thawing permafrost in the ARCTIC region of Alaska, Nikkis' projects often INVOLVE close multi-disciplinary collaborations with scientists, social scientists, philosophers, and others.

