

Open Space



Where the Wild Things Are Going

Protecting Habitat in a Changing World

Its effects can be seen globally as ice caps melt into the sea and locally as extreme weather and increasingly frequent “100-year” storms batter our landscapes. Climate change is upon us.

As the climate changes, plants and animals are finding that their habitats are changing as well. Higher water temperatures, for example, may alter nutrient and food chains for fish in freshwater ecosystems. Likewise, as snow cover decreases across the northern United States and Canada, the already-threatened Canada lynx is left with a shrinking area in which to breed and hunt.

It makes sense that the conservation community would play an important role in countering climate change by protecting places where plants and animals can thrive and adapt. Yet many in the land trust movement say they’ve struggled to connect the dots between conservation and a changing climate.

“Climate change can be an overwhelming concept for a land trust with a defined local or regional geographic scope,” said Alan Stearns, executive director of the Royal River Conservation Trust in Yarmouth, Maine. “Only now is scientific research starting to predict with more

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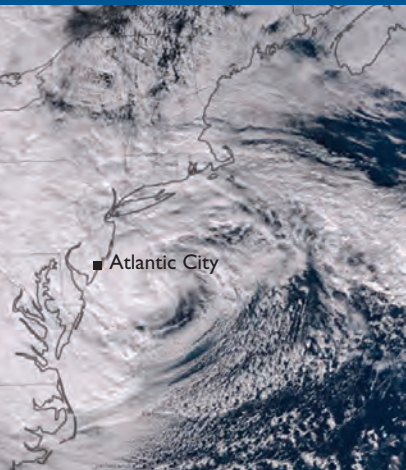
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Our Mission

The Open Space Institute protects scenic, natural and historic landscapes to provide public enjoyment, conserve habitat and sustain communities.

Founded in 1974 to protect significant landscapes in New York State, OSI has been a partner in the protection of nearly 2.2 million acres in North America. A leader in environmental conservation, the Open Space Institute leverages our knowledge and attracts resources for strategic investments to make innovative land conservation happen.



Hurricane Sandy

Jesse Allen / NASA

Reflections on Life & Land

Dear Friends,

In October, Hurricane Sandy wreaked havoc on the East Coast, overwhelming parts of New York, New Jersey and other states in the Northeast. The storm came just 14 months after Irene destroyed homes and farms throughout New York's Hudson River Valley and the Catskills.

Irene and Sandy have not just hit our landscapes hard; they've tested our resolve as people. As we rebuild our homes and communities yet again, we realize that these powerful storms—harsh reminders of a changing climate—are becoming the new normal.

If we are to thrive in this new reality, it's important that we act swiftly and collectively to slow the effects of climate change and protect the lands most resistant to its effects.

In early 2013, OSI will do just that. With the generous financial support of the Doris Duke Charitable Foundation, our new Northeast Resilient Landscapes Initiative will make \$5.5 million in grants available for conservation projects that protect the region's most "resilient" landscapes. Using 10 years of research by The Nature Conservancy as its scientific basis, OSI will identify landscapes in the Northeast whose wide variety of physical features make them more likely to withstand the ongoing impacts of climate change. Flora and fauna, therefore, will have a better chance of finding habitat in these diverse, resilient landscapes—now, and in the future.

In this timely issue of *Open Space*, we explore climate change and resilience in detail. You'll also read about OSI's Citizen Action program, which is helping farm-to-table advocates teach children where their food comes from.

Our initiatives range from wildlife habitat to local food, but the thread that weaves through all our work is protecting the land and its many values—biodiversity, water, recreation, agriculture, forestry and community. We thank you for your interest and your support.

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From Schoolyard to Farmyard

Urban Farms Teach Kids about Food



Katie Hope

Students planting vegetable beds at Gaynor Campus Garden, Brooklyn, NY

Whether it's dissatisfaction with an industrial food system and a desire for fresh food grown locally, or simply a longing to connect more authentically with the land, urban farming has surged in popularity in recent years.

That surge is perhaps most evident in New York City, where fresh-food advocates are helping kids learn where their food comes from by teaching them to garden on schoolyard lawns.

OSI's Citizen Action program, which provides fiscal sponsorship to more than 60 grassroots environmental projects, is partnering with several such groups in Brooklyn. At the High School for Public Service, volunteers from BK Farmyards are helping students turn the school's 1.25-acre lawn into a productive, educational farm. Fruits and vegetables grown there are being sold at a weekly onsite

farmers market.

In Brooklyn's Williamsburg neighborhood, Sprout Farms is also making the most of urban open spaces by teaching kids that a little green can go a long way.

Utilizing a 35-by-45-foot space that's shared by the Green School and Lyons Community School, Sprout Farms is teaching students in grades six through 12 to grow a variety of peppers, tomatoes, fruits and greens.

The schoolyard setting has grown popular within the farm-to-table movement because it exposes young minds to the natural world and promotes healthful food. Although students in most New York City neighborhoods have ample access to chips and soda, fresh vegetable markets are not yet commonplace in every community.

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BK Farmyards:
www.bkfarmyards.com

Sprout Farms:
www.sproutfarms.org

Farming Concrete:
www.farmingconcrete.org

OSI's Citizen Action Program provides a home for over 60 environmental projects started by concerned citizens who want to make their world a better place.

Schoolyard to Farmland

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“We’re trying to create an opportunity for these students to eat healthy foods and not have to think twice about it,” said Katie Hope, one of the founders of Sprout Farms. “We want to introduce them to the idea that this kind of food is available here, too.”

Last year, another Citizen Action group, Farming Concrete, found that 67 community gardens in New York City—which take up a total area of only 1.7 acres in New York City—generated 87,000 pounds of produce. Neighborhood by neighborhood, programs like these are encouraging both kids and adults to put their hands in the earth

and connect, possibly for the first time, with the environment that surrounds and provides for them.

These Citizen Action groups thus combine grassroots activism—one of OSI’s founding and core values—with participatory, interactive learning and a healthy way of living.

As urban and schoolyard farming programs continue to expand, Hope envisions taking Sprout’s youth farmers on field trips to other city gardens throughout the five boroughs.

“We want to create a network of young people that are interested in this,” she said. “We especially want to move away from the idea that there’s no productive green space in the city, because there is.”

Citizen Action Groups

93rd/94th St. Preservation Alliance
Abingdon Square Alliance
AFFIRM, Inc.
Ayres Law Group
Better Future Project
BioCities, Inc
BK Farmyards
Black Urban Growers
Brooklyn Food Coalition
Butterfly Project
Citizens Emergency Committee to Preserve Preservation
Compost for Brooklyn
Concerned Citizens for Open Space, Inc.
Deuel Hollow Conservation Association
Earth Matter NY
Educating Tomorrow
Essex Farm Institute
Farming Concrete
Flip the Table: Youth Food Council
Friends of Bleecker Playground
Friends of Catskill Park
Friends of Gulick Park
Friends of the Housatonic
Germantown Neighborhood Association
Good Profit
Green Apple Kids
Green Edge NYC
Green Spaces Innovation Institute (GSII)
Grounded Knowledge
GroundwaterGo
Grow Smart Dover

Growing Chefs
Infrastructure USA
Jones Beach Rescue
Long Island Community Agriculture Network
Millbrook Matters
National Young Farmers’ Coalition
New York WILD Film Festival
No Time to Lose
Parents for Climate Protection
PlayHarvest
Corbin Hill Food Project
Prospect Heights Community Farm
Protect the Village Historic District
Quaker Hill Civic Association
Rego Park Green Alliance
Rondout Valley Growers Association
Saugerties Citizens for Smart Development
Science Partners Learning about Animals of the Sound and Hudson (SPLASH)
Seeing Green
Sensible Wireless for Gardiner
SNAP Gardens
Sprout
Stand for Land
Stewart Park and Reserve Coalition (SPARC)
Sustainability Practice Network (SPN)
Sustainable Flatbush
TARGET Tuxedo Inc.
The Fox Collection
TreeKIT
Turf
White Roof Project



Katie Hope

Land Matters *News & Events*

Finding a Way for Forestry and Wildlife to Cooperate

OSI has been hired to work with forestry and wildlife agencies in Florida, Georgia, Kentucky, Missouri, South Carolina, Tennessee and Virginia to identify ways that the state agencies can improve conservation results on the ground.

Every state is required to complete forest action plans and wildlife action plans to qualify for certain federal funding streams, but the states' forestry and wildlife agencies have different mandates: one is focused on wood markets and the other on habitat. Now, with financial resources diminishing and stressors like wildfire, invasive pests and

forest fragmentation rising, coordination between state plans is more urgent than ever.

The U.S. Endowment for Forestry and Communities chose OSI to manage a project promoting cooperation between these agencies in the seven states. The goals of the project are to reduce duplication and increase the effectiveness of the states' conservation efforts. By demonstrating the benefits of collaboration, this project could lead to more financial incentives for cooperation between state forestry and wildlife agencies.

2013 Land Conservation Awards

In April, the Open Space Institute will celebrate the achievements of Carol Ash and Samuel F. Pryor III with the presentation of the Land Conservation Awards at our annual luncheon. Carol Ash is the President of the Carey Center for Global Good and served as Commissioner of the New York State Office of Parks, Recreation and Historic

Preservation from 2007 to 2010. Sam Pryor, a dedicated conservationist, serves on the board of the Palisades Interstate Park Commission.

OSI's Land Conservation Award honors individuals who have made outstanding contributions in the fields of land conservation and environmental protection.

State Adds Land to the Adirondack Park



Jerry Monkman

Boreas Lake part of the state's acquisition

as a boon for New York's upstate region. The lands, which will be opened to the public for the first time in more than 150 years, will help make the Adirondacks an international tourist destination, Cuomo said, and will bring jobs and other economic benefits to the North Country.

In early August, Gov. Andrew Cuomo announced New York State's purchase of 69,000 acres of forestland in the Adirondacks from The Nature Conservancy (TNC). All but 4,000 of the acres—which account for the largest single addition to the Adirondack State Forest Preserve in more than a century—were part of the former Finch, Pruyn timberlands that TNC acquired with a \$25 million loan from the Open Space Institute in 2007.

Gov. Cuomo hailed the acquisition

Strong Easements

Recently OSI sponsored a nationwide effort on strategies to strengthen conservation easements, one of the land trust movement's oldest and most effective tools.

Easements—voluntary, binding agreements that restrict the development and subdivision of a property while preserving its ecological or open-space values—have protected millions of acres of wildlife habitat and open space, and nearly all land trusts and public conservation agencies have included them in their land protection arsenal over the past several decades.

Drawing on the experiences of organizations in seven states, Solid Ground Consulting conducted in-depth interviews with various leaders in the conservation community and reviewed key court cases regarding the terms of easements.

The study's preliminary findings were presented at the Land Trust Alliance Rally in Salt Lake City in October. Once officially released, the study will offer land trusts guidelines for strengthening the terms and effectiveness of existing and future easements.

If you or your organization would like a copy of the "Easement Revitalization Report," contact OSI at info@osiny.org.



Brett Cole

Farmland in New Jersey

RESILIENCE:

*“The capacity
for renewal
in a dynamic
environment”*

—Lance Gunderson
Professor
Emory University

Where the Wild (*cont. from page 1*) confidence what future landscapes and ecosystems might look like, and thus what acreage might have ecological benefits in the future. Still, even today’s best science includes a wide variation of predicted climate impacts.”

Armed with new research published by scientists from The Nature Conservancy (TNC), the Open Space Institute will work to change that by focusing attention on places that are important to conserve—today, and for flora and fauna hundreds of years from now.

The TNC report, authored by a team headed by conservation scientist Mark Anderson and based on more than a decade of research, posits that wildlife diversity is directly related to landscape diversity: the physical characteristics of a diverse landscape—its slopes, valleys, ravines and lowlands, for example—are directly responsible for supporting a rich array of species. Further, TNC’s research indicates that these areas will continue to do so, even in the face of climate change.

Although species and their habitats will respond to climate change in ways that are difficult to predict, these “resilient” landscapes will provide the most options, offering refuge to an array of plants and animals.

“Resiliency is a much more accessible concept than climate change,” Stearns

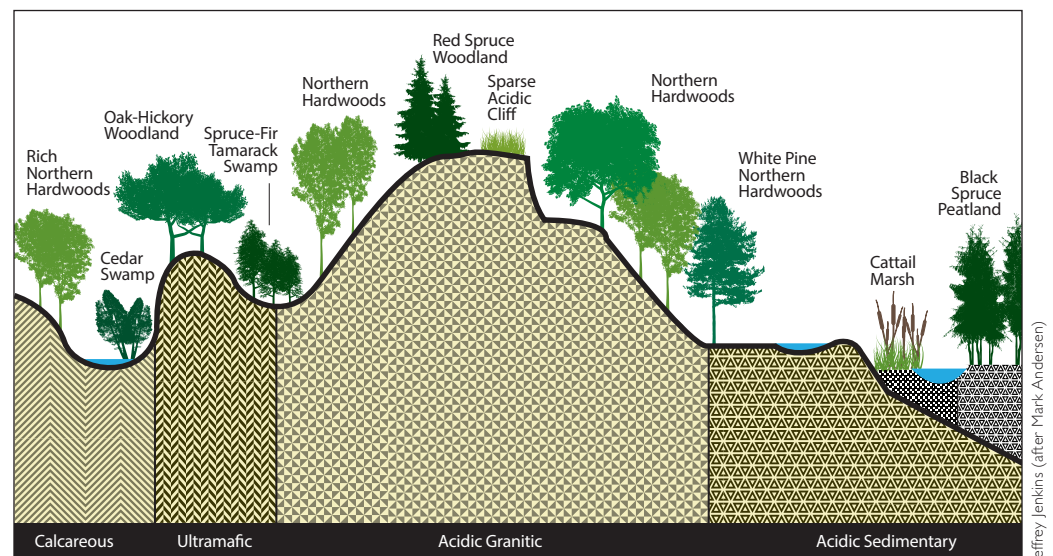
said. “I can talk to people about resiliency in the context of one stream, one forest or one farm.”

With the generous support of the Doris Duke Charitable Foundation, OSI is launching the Northeast Resilient Landscapes Initiative, which will engage land trusts and public agencies in the northeast U.S. to direct conservation toward these resilient landscapes.

Backed by 40 years of transactional experience and a loan and grant program that has distributed nearly \$100 million over the past decade, OSI will use TNC’s resilience work as the scientific underpinning of this new grant-making initiative.

“OSI is eager to bring new science, new funding, and a new way of addressing climate change to land trusts and agencies in the Northeast,” said Peter Howell, OSI’s executive vice president. “We believe this program will equip conservationists with the capacity to help offset climate change.”

With ongoing consultation from Anderson, OSI has convened leading scientists from across the Northeast to guide the program. Early in 2013, the organization will launch the capital fund that will provide \$5.5 million for land acquisition in selected regions, as well as a complementary initiative to help land trusts and public agencies incorporate resilience science in their work.



Physical diversity equals biological diversity

It's Too Darn Hot

Questions on Climate and Evolution for Mac Hunter

Malcolm L. "Mac" Hunter, Jr., is a professor of wildlife ecology at the University of Maine and a member of the science committee advising OSI's Northeast Resilient Landscapes Initiative. Hunter's research has focused mainly on forest ecosystems and the maintenance of their biological diversity. He spoke recently with OSI's Abby Weinberg about species adaptation, habitat connectivity and resiliency.

How do species adapt to change in general?

At a fundamental level, evolution is an adaptation to change. We have sex to rearrange our genes, which allows each new generation to adapt to change.

The natural follow-up question is to ask whether sex is the solution to climate change.

Sex can, if given enough time, allow a species to respond to almost any external environmental change. The problem is time. Most species require multiple years for each generation. We have documented that many species are not able to keep pace with the changes in climate that we are witnessing.

What can a land conservation organization do to help counteract the effects of climate change?

One strategy is to try to contribute to ecological connectivity at the regional scale. The riparian zones along rivers are wonderful examples. Rivers are long, linear features and we have lots of good reasons to protect their shorelines anyway—for recreation and water quality—but they can also represent important ecological connectivity.

Just step back and look at the map and see places where connectivity could be restored or maintained. Mountains are often organized into ridges, and if those ridges are protected, they

provide long, intact corridors for movement. Not every land trust is going to have this opportunity, but for those in places where there are significant altitudinal gradients, protecting land at the top of the mountain down to the bottom of the valley is a good thing to do. We have done a pretty good job of protecting mountaintops, so nobody is going to put a shopping mall on the top of a mountain. We've done less of a good job protecting the valleys and protecting the whole altitudinal range.

Can you talk a little about this new resilience science and how it may play a role in informing adaptation strategies?

We need to embrace or at least accept change. We should not be concerned about the particular suite of species that happen to be there; we should be concerned with protecting the environment that they inhabit over time.

Mark [Anderson, science director for TNC's Eastern U.S. Division] has shown, through a very sophisticated analysis, how that could play out in northeastern North America by looking at some of the enduring features of the environment, things like altitudinal gradients and diversity of bedrock and soil types and hydrology. Those fundamental underpinnings of ecological diversity that lie within the physical environment can be great predictors of where biological diversity can find refuge. We're protecting the stage. Don't worry so much about what actors are out there at the moment.

So, returning to your first point, if we protect the ecological stage, does it lessen the importance of sex?

Even with a strong ecological stage protected—and we are far from being finished with that work—species will still be experiencing many unprecedented challenges. Genetic diversity and sex will play an important role as well.



*Malcom L. Hunter, Jr.
Professor of Wildlife Ecology
University of Maine*

Read the whole interview at
www.osiny.org/hunter

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Katie Hope

OSI Citizen Action project, BK Farmyards, helps high schoolers grow vegetables in Brooklyn, NY.