Spring 2012

To inspire curiosity and build knowledge about pla<u>nts and wooded landscapes</u>

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in order to enhance life, preserve nature and advance sound stewardship practices.

To the Members and Friends of Highstead



As this peculiar winter transitions into a gorgeous spring across New England, Highstead is ushering in some measured changes of its own to advance conservation across the region. Of greatest import is the arrival of Emily Bateson in the new position of Conservation Director. Emily brings great energy and immense skills to our efforts through her tremendous experience at the Conservation Law Foundation and Sweet Water Trust, and as Co-founder and Executive Director of the U.S.-Canadian partnership Two Countries One Forest, Associate Director of the Hubbard Brook Research Foundation and Deputy Director at Environment Northeast.

In the creation of this new position we recognize that our conservation mission requires full-time and experienced leadership. Since her arrival it has been gratifying to see Emily work closely with the staff and our senior fellows to tackle local to regional conservation projects and advance major policy platforms through collaborations with many regional and national organizations and agencies. In order to ensure that our own beautiful landscape and facilities in Redding continue to be managed in an effective and sustainable manner, we have launched an active search for a new Operations Manager whom we plan to have in place later this spring.

A large research project involving many Highstead associates recently released a report that reminds us

of the importance of our mission to human well-being.





David Foster is Director of the Harvard Forest at Harvard University and President of the Board of Highstead Foundation.

The study, which is available on the Highstead website, demonstrates that across a state like Massachusetts the annual growth of forests stores the equivalent amount of carbon dioxide produced by over one million homes, thereby abating the increase of this climatechanging gas in the atmosphere. However, this natural infrastructure requires safeguarding. The report goes on to show that if current trends of forest destruction and development continue over the next half-century this capacity of our forests to abate climate change will decrease by nearly twenty percent.

At Highstead we seek to employ such science and a broad appreciation for our forests to the important task of conserving our New England landscape for generations to come.

From the Conservation Director

Emily M. Bateson



Dear Highstead Members and Friends,

It is with great pleasure that I write to you for the first time as the Conservation Director of Highstead. I have spent the last 25 years as an advocate for the forests of New England, and Highstead's leadership in advancing the Wildlands and Woodlands (W&W) goal to conserve 70% of the region as forests is a mission near and dear to my heart. I am honored to be starting this exciting new chapter at Highstead, and working with colleagues throughout New England to conserve our forested landscape while we still have the chance.

Highstead is also committed to implementing the W&W vision close to home.

Most importantly, Highstead's 165-acre parcel is predominantly





Highstead maintains more than 90% of the property as natural woodland. Highstead has also embraced the W&W vision of 10% of the region's forests in "wildland" reserves, left alone and shaped only by the natural environment: our management plan includes a 15-acre wildland reserve in a secluded portion of the oak forest. Science – taking the pulse of our forests - is also central to the Highstead mission, as reported by our Ecologist, Ed Faison, in this issue.



above: Highstead skunk cabbage in the early spring.

With hundreds of acres of protected forestland contiguous to Highstead (owned by the Redding Land Trust, the Town of Redding, private citizens, and The Nature Conservancy), we are working with our partners to conserve the regional habitat connectivity so important to people and wildlife, particularly in a time of climate change. Highstead's work with the Fairfield County Regional Conservation Partnership, as reported by Bill Labich in this issue, is also focused on expanding the scale of conservation. It is through such local conservation, connected to regional collaboration and an inspiring vision, that New England will successfully conserve its invaluable forestlands. I look forward to working with all of you on this vital goal as we move forward.

Emily M. Bateson, Conservation Director

Stewardship Science

Ed Faison Highstead Ecologist



Highstead Ecology 2012: Adaptive Management at Work

Most of New England's natural landscape is, in fact, managed for particular attributes such as wood products, biodiversity, recreation, and aesthetics.

And how do we decide when a change in management is necessary? The truth is we can't really know, and we have to guess, unless we monitor the areas being managed and compare them with similar unmanaged areas.

This reality lies at the heart of "adaptive management," an ecological concept that considers each management action as part of a long-term experiment with appropriate controls (unmanaged areas) and rigorous data collection to evaluate consequences, changes, and success. Management activities are adjusted based on results in the context of the original plan and objectives. Although a few organizations in New England use this approach, the majority



above: Highstead pond with patch of invasive Phragmites grass on far side.

three-acre pond and promote native wetland herbs. Monitoring plots will be established and sampled prior to treatment (mowing followed by careful application of herbicide), and the response of native vegetation and Phragmites will be measured over many years. A second project is evaluating whether deer hunting since 2006 on Redding town and state-owned properties has allowed increases in tree regeneration in these forests and in comparison to unhunted areas. With these projects and our regional-scale forest monitoring program - Wildlands and Woodlands Stewardship Science – Highstead will continue to promote adaptive management as an effective and informed approach to conservation management.



Given that so much land is influenced by human activity, how do we know if our management activities are successful or sustainable?

of land management occurs without consistent monitoring and evaluation and little assessment of long-term effects. This is not just a New England problem. In the words of Australian ecologist David Lindenmayer and his American co-author Jerry Franklin in a recent book on ecosystem management, the state of forest monitoring around the world is "appalling."

In 2012, Highstead's ecology program will conduct two adaptive management projects. One seeks to remove the invasive grass Phragmites from our

Conservation Collaboration in Connecticut and Beyond

Across New England, conservationists are collaborating with like-minded groups to achieve land conservation on a bigger scale. And as a result they are discovering new opportunities, new funding, and greater success as they wrap local conservation into a package that includes both local interests and the larger ecologic and economic picture - as set out in the W&W vision.

In Highstead's backyard, members of the Fairfield County Regional Conservation Partnership have produced their first-ever regional greenway conservation map.

below: The Fairfield County Regional Conservation Partnership draft greenway conservation vision map



Greenway

2 Priority Areas From Town Open Space Plans Protected Open Space Undeveloped Land of High Conservation Value (Top 33%) Undeveloped Land of Lesser Conservation Value Developed Land

CT Development Policy Zones (Not Already Developed)

Based on goals for open space shared by the region's ten towns, and compiled with Highstead's assistance, the draft map was immediately employed to support the Town of Bethel's recent vote to purchase 72 acres of woodlands and fields on the Bethel/Newtown CT town line. The resulting 150 acres of contiguous woodland is a critical link in the open space that extends between the centers of these adjacent towns.

In the future, the greenway map will assist area towns and landowners in identifying, prioritizing, and conserving valuable habitat and recreational trails. Members of the partnership seek to retain a connected landscape that allows people and animals to travel more easily within and through the region.

With support from a new, three-year \$450,000 federal grant, Highstead is also working with the North East State Foresters Association and conservation groups across southern and central New England to advance partnerships in four large, targeted landscapes that stretch across state boundaries. The overarching objective of the initiative is to find new and effective ways to bring land management and conservation information to family forest owners, and to thus help replace the recent trend of land sales and habitat fragmentation with a new trajectory of permanent land conservation and sustainable forest stewardship.

Regional Conservation

Bill Labich Regional Conservationist



Highstead Happenings and News 2012



Highstead welcomes members and nonmembers alike to participate in these events. If we do not already have your email address, please send it to info@highstead.net so we can send you event updates - and the newsletter electronically if you would prefer.

Saturday, June 2 10:00 am to 1:00 pm:	Highstead Open House and Walking trails will be open fo
10:30 am to 12:30 pm:	For those who prefer a guided Landscape and Collections M collection and also discussing permanent plots and how is t Wildlands and Woodlands la
1:00 pm to 2:00 pm:	Implementing the Wildland through Conservation Coll Highstead Regional Conserva and across New England to v scale.
September 8 – October 27 Viewing is weekdays 9:00 am to 4:00 pm	Art Exhibition: Habitats of Guild of Natural Science Illu Greater New York Chapter
Saturday September 8 11:00 am to 12:30 pm:	Opening: Habitats of the E Artists from the Guild of Nat Highstead to show and discu opening and learn the stories
1:00 pm to 2:00 pm:	Bears, Bobcats, Moose, and One Tracking Course at a T Susan C. Morse is the found

ler of Keeping Track, a nonprofit organization devoted to training professional biologists, conservation leaders, and citizen scientists alike in wildlife monitoring skills so they can use their knowledge to detect, record, and monitor the status of wildlife and wildlife habitat in their communities. Ms. Morse is also a highly regarded wildlife photographer and will discuss through her photographs the value of community-grounded habitat conservation in the context of the regional Wildlands and Woodlands vision.

Highstead Remembers Frank Cabot We join with so many others in paying tribute to Frank Cabot for his considerable accomplishments in the world of landscape conservation and horticulture among other things.

nd Trails Day

for self-guided tours and visits to the Laurel Collection in bloom.

ed tour, please join Highstead Ecologist, Ed Faison, and Highstead Manager, Kathleen Kitka, as they lead a walk showcasing the Laurel g Highstead's science program: what has Highstead learned from its that informing management of Highstead as a part of the broader andscape?

ds and Woodlands Vision laboration

vationist, Bill Labich, will talk about inspiring efforts in Connecticut work more collaboratively to achieve conservation at the landscape

f the Eastern United States

ustrators -

Eastern United States

tural Science Illustrators - Greater New York Chapter will be at iss their work on display at the Highstead Barn. Join us for the s and inspirations that gave rise to the artists' work.

d More: Building Community and Conserving Habitat,

Frank's friendship, support, and sound advice from the earliest days of Highstead will long be remembered and ever appreciated. His remarkable vitality and imagination are greatly missed.

Conservation Finance

Jim Levitt Senior Fellow



Conservation Finance Innovation in MA

On February 13, 2012, forest and conservation leaders joined Massachusetts Energy and Environmental Affairs Secretary, Richard K. Sullivan Jr., and state legislators at the State House in Boston to celebrate the completion of an innovative report by the Massachusetts Commission on Financing Forest Conservation.

The report (at http://www.wildlandsandwoodlands.org/MA-forest-finance) is the culmination of five years of work on forest conservation finance led by Jim Levitt, Senior Fellow at Highstead and Director of the Program on Conservation Innovation at the Harvard Forest. The Commission's report emphasizes four key conservation finance themes: aggregation for conservation, mitigation for conservation, compact land development, and targeted forest-based economic development.

This detailed report builds on recent advances that help make Massachusetts a national leader in conservation finance, including:



above:

The commission members and conservation leaders gathered for a celebration ceremony at the Massachusetts State House. Left to right: Robert O'Connor, Senator Stephen Brewer, Matthew Zieper, Keith Ross, Lynn Lyford, Leigh Youngblood, Michael Fleming, Stephanie Cooper, David R. Foster, Jim Levitt, Richard K. Sullivan, Ed Lambert.

> These different efforts help advance and were in part inspired by the Wildlands & Woodlands vision.

- 1. the Patrick administration's commitment to fund \$45-50 million of land conservation annually;
- natural resource protection zoning recently adopted by several MA towns;
- 3. a conservation tax credit program that provides financial incentives to landowners who donate conservation land to a municipality, the state or a nonprofit conservation organization; and
- 4. a Landscape Partnership Program that funds land conservation projects that aggregate or bundle many individual parcels together into larger deals.

Science-Policy Bridge

Kathy Lambert Senior Fellow





The research is based on the premise that science is best positioned to inform and motivate land conservation and guide decision-making when it is attuned to the knowledge and needs of people and groups making real-world decisions.

Led by David Foster, Jonathan Thompson, David Kittredge, Kathy Lambert, and others, the Future Scenarios of New England initiative started with a pilot effort in Massachusetts. With detailed maps and landuse history information, scientists built a model to forecast landscape change in response to different scenarios of development, forest harvesting, conservation, and climate change. The scenarios were defined in collaboration with conservation and land



planning professionals and state agency officials. For each of these scenarios, we will analyze the resulting landscape conditions and their consequences for water quality, forest carbon, wildlife habitat, and timber production.



Our Land; Our Choices

What does the future hold for New England's landscape?

The Harvard Forest and Smithsonian Institute for Conservation Biology have teamed up with conservation professionals to create a crystal ball of sorts. Through a new research project that builds on the Wildlands and Woodlands vision, we are assessing different scenarios of future land use change for New England.

By bringing together scientific research, conservation practice, and policy makers we hope that "Future Scenarios" galvanizes public officials' and private forestland owners' support for accelerating the pace of conservation in New England.

above: Forest conversion in southern New England.



Highstead

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Printed on recycled paper.

Come be inspired

Saturday September 8, 2012

1:00 - 2:00 pm Highstead Barn

Susan Morse Keeping Track founder

Bears, Bobcats, Moose, and More: Building Community and Conserving Habitat,

One Tracking Course at a Time

Bobcat: early morning success portrait Photography: Susan C. Morse