

**Convergence 2013**  
**Notes from Speakers & Discussions**

**KEYNOTE SPEAKER: James Levitt, Harvard Forest, Harvard University: "Large Landscapes and the Past, Present, and Future of Conservation"**

National Parks: Enduring, growing and important innovation

Land trust movement began with the in 19<sup>th</sup> cen Trustees of Reservations (see <http://www.thetrustees.org/about-us/history/>)

Trustees of Hancock County Reservations gave rise to Acadia NP.

Acadia NP created entirely of private lands, philanthropists, first NP east of MS River.

MCHT: Began when Rockefellers donated land and worked for years to get IRS to accept an easement as a deduction, accomplished by 1979.

Now conserved lands by land trusts exceeds 50 million acres.

Now Chile is looking at the easement mechanism for land conservation.

Each of these groups, LTs, Parks, etc., is a network.

We can observe the impacts of climate change in minute detail.

The question: How do we tie all the networks and mapping systems, etc, together to connect and protect whole landscapes to reap all the benefits?

One example: Practitioners' Network for Large Landscape Conservation (LCC, see <http://www.largelandscapenetwork.org/>)

LLC idea is being picked up around the globe. Example: Home Depot asked Chile to conserve native forests and manage forests sustainably. Now TNC has a huge coastal reserve pulled together in last 10 years.

Opportunities exist to create conservation corridors in Downeast Maine across jurisdictions, sectors, etc. Example: Effort to create corridor between Schoodic conserved lands (federal and private LT) to the Donnell Pond unit (state).

Also, opportunities to connect Grand Lake Stream to coast.

Connecting properties along the newly-undammed Penobscot River: Veazie Dam deconstruction was a subject of a class project last year, considering future management of the free river. (<http://www.penobscotriver.org/content/5012/veazie-dam-removal>)

Harvard Forest is working on these sorts of efforts, including Acadian Internship Program.

Harvard Forest is inviting students from Downeast Maine and around the world to submit essays to

apply for one of five trips to the upcoming IUCN meeting. Send essays to [james\\_levitt@harvard.edu](mailto:james_levitt@harvard.edu).

### Q&A for Jim Leavitt

Question: Land conservation is often perceived as having a negative economic impact on the economy. Response?

Answer: There have been many studies that show that land conservation is beneficial to the economy. The narrative that is effective: Think about the future. There may be a bright future in sustainable forestry in Maine, for instance. We're here to give you a livelihood, as well. Tremendous potential impact of tourism. Alewives coming back and bringing economic value. For people who live in the interior in Maine, we have to help them think about past, present and future.

Comment: What we saw in Bar Harbor with the shutdown of the federal government was "just chaos." Some kind of park in northern Maine makes sense because we have a community economically dependent on ANP.

Answer: It's important to be politically active.

Question: On land ownership, what was the impetus for the increase of easements.

Answer: It was the Rockefellers' idea for legal mechanism for conservation. To do this [LLC], we need advanced technology, economic and legal mechanisms.

Comment: We need marine reserves where fishing is prohibited to support marine ecosystems. This is something we need to learn from other parts of the world.

Answer: There are some, don't know where they are off the coast of Maine. Suggest: Opening Penobscot may offer some opportunities for marine conservation.

### **Bill Labich, Regional Conservation Partnership Network, Highstead: "Regional Conservation Partnerships: the New Face of Conservation in New England"**

Map of regional conservation partnerships with climate resiliency data from TNC

How can you create regional conservation partnerships (RCP)? Informal network of people with shared conservation vision. 20 year movement, constantly growing.

Highstead, a conservation organization (<http://highstead.net/>), began with local initiatives through Massachusetts Wildlands & Woodlands—goal of 70% conserved by 2060--and grew to regional initiative. Now leading an RCP with Harvard Forest, Highstead and others.

There are already 100s of conservation land trusts, 100s of thousands of landowners, 100s of municipalities. We need new ways of coordinating activities across the landscape: RCP.

RCPs share info, share memberships and coordinate their activities.

Need also to increase funding from multiple sources, and RCPs help to attract more money, partnerships with government to allow more strategic planning/ activities (fed, muni and state), private funding. Funders like to see this kind of collaboration.

Many RCPs conserve lands as partnerships.

Quabbin to Cardigan Conservation Collaborative example: Went through 3-year planning process, steeped in science, to identify focus areas. Real progress happened with due diligence fund targeting focus areas. Protected 90,000 acres. Two rounds of funding by NRCS, then when federal funding dried up, private donors stepped in.

RCP Network coordinated by Highstead: 2010 New England meeting, grown to provide services:

- Regional networking, state and regional meetings, service provider database, and other networking services, LinkedIn, webinars, etc.
- Research on success of RCP. Key role of lead group leadership. Found common pattern of development of RCPs: emerging, maturing, conserving. Also found RCPs need funding for transactions, etc.
- RCP Network, for instance, working with state foresters in each state to engage forest landowners, leading to a paradigm shift in desire to work with RCPs and NGOs.
- Has raised funding for RCP work in conserving lands.
- Mentor RCP leaders, training programs, North Atlantic LCC working with organizations who want to take science and make it useful to those working with large landscapes.

#### Q&A for Bill Labich

Question: What proportion of funding goes to land conservation, and what goes to other activities like stewardship?

Answer: All conservation is local, but RPCs coordinate among them. In capital campaign, most goes to acquisition and less goes to stewardship.

Question: What would it take for DEREN to move from emerging to maturing and then conserving?

Answer: Assuming you meet regularly, say four times a year, have a regional strategic conservation vision. Look for opportunities for strategic collaboration opportunities. It's one thing to put your map together, but you need to determine who is going to do what and what will be done by the RCP as a unit? Think about reaching out to stakeholders: municipalities, landowners.

Questions: What role do regional planning councils play in your partnerships?

Answer: I'm a planner. Example, Lower Ct River RCP, now managed by the COG. Pay the coordinator of landscape exchange, provides partnership with some sustainability.

#### **Panel Discussion: "LLC Efforts in Down East Maine "**

**Downeast Lakes Land Trust, Downeast Coastal Conservancy, Downeast Salmon Federation, Maine Coast Heritage Trust, Blue Hill Heritage Trust, and Frenchman Bay Conservancy**

Panelist: Marty Anderson, Maine Coast Heritage Trust

Conservation Partnerships in the Cobscook Bay Whole Place

Whole Place: Priority conservation site where significant, multiple values and where MCHT takes a

proactive approach to conservation. Key: Linkages, important to local communities, recreation, etc.

Cobscook: Bald eagles, public access for fisheries and recreation, fish habitat, seabird nesting island, bird habitat, wetlands, etc.

So, how do you conserve those attributes? Focus efforts on discrete areas within the area, build on prior work, and partnerships.

MCHT: Tech and legal support, help with transactions, funding, etc.

Cobscook: DCC, MCHT, fed, state conserved lands have created a patchwork... over 100 projects completed, MCHT has participated in about half of these, but only holds about 15% of the land. Other partners: private landowners, other non-profits, granting agencies, regional planning organizations, educational institutions.

Panelist: Mark Berry of Downeast Lakes Land Trust  
Conservation as Economic Strategy

The original mission of the trust was economic development with conservation and stewardship as tools.

Forest and lakes for people forever.

Group in a very small community with no history and no experience, but vision became very large quickly: 100s of thousands of acres. Now have many more of acres in conservation and in development through fee and easement in permanent protection, including Passamaquoddy forest lands and the Machias River corridor. Total is close to 1.5 million acres, much in Canada.

Stewardship is a long-term challenge: opportunity and commitment to have voice of the public. Habitat, recreation, and sustainability timber habitat. Lots of developed aquatic connectivity and built trails.

Economy in Grand Lake Stream is almost entirely tourism. County as a whole is focused on forestry.

Partners: government at all levels, conservation organizations (local to national), corporations, foundations, networks, and mgt partners. DLLT has only 3 staff!

Panelist: Sherrie Sprangers of UMM, board member of Downeast Coastal Conservancy

DCC created through merger of two existing land trusts

Merged because both organizations wanted to do large projects and community-engaged projects... Two Rivers Project involving two parcels totaling over 1,000 acres.

Established a community committee, including individuals from town government, educators, business owners, and board members.

Two properties along the Machias and Middle Rivers, which are linked by the Sunrise Trail, close to

schools and properties.

Fund raising through sponsored acres program locally. Also, funders liked the community engagement.

Took just under two years to raise \$1.9 million to complete the project.

Middle River property has trails, boat launch, and recreation.

Machias River property has links to the Machias River corridor and plans for community forest with educational activities on forest conservation practices.

Key partners: MCHT, schools, partnerships, and community.

Panelist: Dwayne Shaw, Downeast Salmon Federation, formed by anglers in 1982; Downeast River Land Trust formed when salmon were listed as endangered.

We came to land conservation from a different perspective: Concern for endangered salmon, no one else was conserving lands to benefit the salmon.

Group went through a difficult time when salmon were listed, decided to partner and come together. Salmon connect us all.

We look at the world through goggles and a snorkel, need to be thinking about aquascapes and connections with landscape.

Focus on one small but interesting project: Smelt habitat preserve on Redmond's Creek in Harrington. Trails were already there, because it is an important smelt spawning habitat in the Pleasant Bay area, 8 acres total, including both sides of stream. Smelt can only get to the waterfall. Dedicated to Charlie Parker, teacher at Narraguagus HS. Brought together the community.

Did a survey of first order streams across landscape in Washington County. Important for productivity, links to terrestrial ecosystems and marine ecosystems. Now ranking and documenting threats.

Next question: can you model the streams to predict smelt habitat?

Route 1 is the dividing line, looking for dams, barriers, etc.

Panelist: Tom Sidar, Frenchman Bay Conservancy  
Schoodic Point (NP) to Donnell Pond Reserve (State) project

Acadia NP on Schoodic north to Tunk Mtn ~ 22 mi long and 8 mi wide. Important for three reasons. FBC focus is watershed quality, wildlife habitat, recreational access.

ANP, FBC, private owners (Schoodic Woods LLC), USFW, State Reserve Lands, State conservation easement, MCHT, plus lots of partners.

A key FBC connector project would connect Long Pond reserve (bought from Phil Dunbar of Sullivan)

to Schoodic Bog FBC project, however, the property between is very fragmented.

First FBC preserve was Little Tunk Pond access, state owns most of the rest of the pond.

Tunk Lake connections now a priority.

Need public involvement.

Panelist: Jim Dow, Blue Hill Heritage Trust

Community-based LT, protecting 6,500 acres & over 100 projects.

In 2008, it was time to get outside professional planning. Worked with Janet McMahon to develop management plan, ID 10 focus areas for protecting character and beauty, economic and recreational use, habitats.

Focus areas comprise ~ 22,000 acres of intact landscape, concentration of conservation value

Followed up with a strategic plan and chose three specific areas to focus on.

Coastal areas are very fragmented, so inland areas are most important. Main opportunities are inland.

Work began capital campaign with economic downturn, which made it tough.

Bagaduce River estuary did enter the picture (though wasn't part of strategic plan's 10 focus areas), partnered with MCHT, submitted & received grant from North American Wetlands Conservation Foundation (<http://bluehillheritagetrust.org/bagaduce/>) to support Bagaduce River effort.

Q&A for Panel

Question: Did you seek outside help to get your board and staff together to ramp up collaboration.

Answers:

DCC: Had outside help with strategic plan, that helped the board be prepared for ramp-up.

BHHT: It's been a gradual progression, but capacity is a real challenge for these small organizations, not to mention issues of stewardship. We are in the process of merging with neighboring LT, expect that merging to continue because of the cost of running a small organization.

FBC: Key was dedicated effort by board and support from MCHT, LTA, Maine LT Network.

DSF: We have a very focused mission on riparian buffers, so the decisions are easier for us. In the regional context, we have been part of collaborative initiatives in the Downeast area. Begs the question of how many organizations there should be.

Question: Why isn't state government more involved in trying to bring back our fisheries?

Answer:

DSF: The state is begging for partnerships around the state. Society hasn't placed priority on removing the many dams that block fishways. Remember, we live on a post-industrial landscape. There's a story

for every stream. Need an inventory and a coalition. It is real estate. LTs should prioritize.

Comment: The state does not put any money into restoring salmon. All this work is federally and privately funded.

**Andrew Cutko, Maine Natural Areas Program: "Conserved Lands in Down East Maine: Have We Saved All the Parts?"**

How much is "enough" conserved lands?

What's in the conservation portfolio for Downeast Maine?

What's missing?

Take Homes:

Now have ~ 19.5% statewide in conservation of some form; all reserved land (no timber harvesting) comprises 3.9%; Downeast/ Acadia is 17%

Now 9% of Downeast/ Acadia is in reserved land, northern Washington, northern Hancock and Penobscot Counties are about 1% in reserved land, 8% is in the coastal region.

Question: have we protected the key pieces from an ecological perspective?

- working forests
- umbrella habitats that benefit wide array of species
- rare natural communities
- rare species
- habitats poorly represented
- old forests

What does it mean for a habitat to be "adequately represented" in conserved land?

- among conserved reflects overall landscape in terms of proportion
- minimum of two sites for each type
- viable systems

Example: Ecological Systems layer (NEW! From TNC)

- assessment with overlay of existing ecological systems

Results:

Statewide, wetlands are twice as abundant as overall landscape, proportionally representative

- At least one of each of 17 habitat types, but 14 of those don't have sufficient acreage or proportionally

Some key findings: Downeast, northern hardwood forest is not represented, comprises ~5% of region, but only ~1% of the conserved lands are of this type.

Three forest types, Lowland Spruce Firs/ Spruce Flats/ Northern Hardwoods are underrepresented in reserved landscape

Implications: this analysis can help with conservation project decisions.

In recent forest inventory: No stands in Downeast over 160 yrs old, 3% were over 130 years, BUT we know how to create old stands...just don't cut them!

Old forest, why do we care?

- Loss is major threat to biodiversity
- Many spp vulnerable to extinction in old forest habitats

Take Home:

- Both how much and what we conserve are key
- New statewide data sources
- Land protection efforts effective for some habitats, less effective for upland forest types.

Remaining questions:

Do conservation organizations have access to GIS data and analysis services?

Should more weight go to wetlands vulnerable to sea level rise?

How do you weigh ecological factors against other considerations?

#### Q&A for Andrew Cutko

Question: Work with Frenchman Bay partners: Frenchman Bay Atlas with all the layers we could find and put them online. That's been key.

Answer: That is increasingly important.

Question: Where can we find that data set?

Answer: Posted on a TNC website, not on state site. (See [http://www.osiny.org/site/PageServer?pagename=Issues\\_Habitat](http://www.osiny.org/site/PageServer?pagename=Issues_Habitat) for info on the resilience work, and [http://www.osiny.org/site/PageServer?pagename=Issues\\_Habitat\\_Resilient\\_Landscape\\_Grants2#gis](http://www.osiny.org/site/PageServer?pagename=Issues_Habitat_Resilient_Landscape_Grants2#gis) for data.) Send email.

Question: Can you clarify how much is enough with regard to aquatic species?

Answer: Well, our models aren't good at aquatic areas. Modeling can be done to map particular conservation goals with more specificity.

Comment: This idea two protected blocks of each habitat is a minimum. What if the habitat is very vulnerable?

Comment: Work in southern NE comparing conservation values and what is protected produced recommendation for better coordination. However, you can find yourself drowning in trying to evaluate so many conservation values over various spatial and temporal scales, including very long term with climate change.

Answer: Resilience layer from TNC is new and getting traction

**Josh Royte, The Nature Conservancy: "Conservation by Design: Planning and Tools for Conservation"**



The northern Appalachian/ Acadian ecoregion is largely intact.

Resilience data layer shows Downeast region very intact.

Need to have both local and global perspectives on conservation.

Conservation planning is a cycle: define, develop strategies and measures, implement, use results to adapt and improve, revisit defining project.

Planning tools:

- Miradi (<https://miradi.org/about>) helps of defining goals, describing and ranking goals, measures, targets, timelines, etc.

Example: Goals... unfragmented blocks, connectivity, etc.

Example in setting goals: How big should forests be? Big enough to withstand a catastrophic event, big enough for breeding territories of diverse populations of inhabitants.

Boundaries need to be large enough to be resilient to change and resistant = adaptive

Key: Diversity of elevation, topography, geology, in addition to biological diversity

Key: Local and regional connectivity.

TNC has tools that help with all of these factors, such as...

Landscape diversity in ecological landscape model using elevation, landform and surficial geology.

Connectivity, ie human footprint maps and regional pinch points based on circuit theory and McRae's circuitscape. Critical for lynx and marten.

For Downeast: Great existing data, all available online. There is some important habitat identified for Downeast resilience analysis. Maintaining connectivity among aquatic areas with formations that have calcium, for instance, makes aquatic habitats more resilient to acid precipitation.

Much of these data are available from MNAP Beginning with Habitat, Stream Connectivity Habitat Viewer, recent aerials show condition of the

Lighthawk: <http://www.lighthawk.org/> Volunteer pilots donating flights for conservation.

TNC Northeast Aquatic Connectivity (<http://rcngrants.org/content/northeast-aquatic-connectivity>): Maine has lots of dams with lots of potential for restoration because of extant fish, relatively intact habitat, water quality.

Tool Barrier Assessment Tool: 90% of culverts don't pass fish. TNC has made barrier map, need more data.

Aquatic Habitat Data at TNC: <http://rcngrants.org/spatialData>

## **Mark Berry, Downeast lakes Land Trust: "Forest Carbon Offsets as a Conservation Finance Tool"**

DRLT has conserved forest properties, and some are being managed toward a late successional stage.

We decided to enter the carbon market. Raising funds for the community forest project to purchase for fee ownership a property which has a current easement and access for the public and won't be developed. Additional goals would be served with fee ownership: eco-reserve, develop recreational access, community forest stewardship activities.

Now will enter the carbon market because we need capital and may be able to attract attention to raise profile and more funds.

Business model: Reduces risk and upfront costs for the LT. No up front capital outlay. The partners are a strong group with a sound model. Farm Cove Improved Forest Management Project with Climate Action Reserve.

The concept is to do an improved conservation project.

Farm Cove Community Forest is a carbon offset project area, required to increase stocking, which is what we wanted to do already. This is a 100 year commitment.

Question that arose during project development: What if we feel we need something like early successional habitat? Ultimately the board decided it would be unlikely.

Climate Action Reserve is a voluntary registry in California.

Farm Cove IFM is the first reserve outside of California registered with CAR

Lots of verification steps, sales process, registered with Air Resources Board in CA.

It has been a four year process with final issuance expected in October 2013.

Expected benefits:

- initial revenue: can harvest a certain amount of timber to earn revenue without dipping into the stock required under the carbon offset contract. Plus funding toward purchase of the West Grand Lake forest project. \$1.5 to 1.6 million... this will cover some of the costs of compliance, in addition to cost of WGL property.

- Long term annual payments.

- Working with current land owner to facilitate the process without borrowing.

### Q&A for Mark Berry

Question: Do you have an out clause?

Answer: Under the provisions of the program, you can exit if you buy your way out with a significant penalty. There are also provisions for things like natural disasters like pests, fire, etc. that are out of our control and that decreases the stock.

Comment: We have also entered the carbon market. We found that the cost of doing it was high, and getting external verification cost double what it would cost for us to do it. So, we hope to decide to sell enough offsets to cover the cost of long-term verification.

Answer: Verification every 6 years and full inventory every 12 years. Appalachian Mtn Club has also done something similar and will likely remain in voluntary compliance, rather than the registered market because of cost. We decided to leave global considerations aside and focus on local mission and resources.

**Facilitated discussion: What are we doing that works? What do we need to do in order to be more effective? How do we accomplish that?**

General question: How does DEREN's role differ from MCHT's?

DEREN is not just focused on land trusts. It's also research and education institutions, educators, and conservation organizations. Broader membership.

MCHT and DEREN have overlapping roles. Can't have enough collaboration and coordination among conservation efforts.

What is it we're doing well?

- Within our own organizations, we are doing lots of collaborative work.
- Ability to bring researchers, land trusts and educators together.
- We do have tools and we are using those tools.
- High concentration of institutions and organizations who do this work.

What is missing, must be done better?

- It's important to look at barriers and conflicts that prevent collaboration
- Often barriers and problems come from places you don't expect. For instance, wind power has divided ostensible allies in Downeast area.
- In general, we're not doing well getting money into education programs, working on basic literacy. Need creative ways to do it.
- Workshops for using tools and data, wind power, hydro power, etc.
- Poster child project in Montana is the Blackfoot Valley: Reframed contentious issues to say "Let's work on the 80% of the things that we agree on." Remember, there's more to do than just protecting land for collaboration, such as invasives, corridors, culverts - broaden the scope of collaborations.
- Food system work related to agriculture.
- Source of info on all this
- Major Gap: Marine fisheries and linkages to land, wetlands and river conservation

Next steps:

- Offer workshops
- Clearinghouse for data, tools, partners, etc.
- Theme for next year: marine/ estuarine connections
- Symposium for Research Projects in Downeast Maine: Connection between Maine, fresh water,

forests, etc.

- What's happening between convergence conferences? More connections and more discussion.