



Jim Levitt focuses his work on conservation innovation—present-day and historic innovations that protect land and biodiversity. He has a particular interest in the role that innovations in conservation finance play in advancing the work of professional and volunteer conservation practitioners.

In addition to his responsibilities as coordinator of the Lincoln Institute's annual Conservation Leadership Dialogue meetings, Levitt directs the Program on Conservation Innovation at The Harvard Forest, Harvard University, and is a research fellow at the Ash Institute for Democratic Governance and Innovation at Harvard's Kennedy School of Government. He is the editor of *From Walden to Wall Street: Frontiers of Conservation Finance* (Island Press/Lincoln Institute of Land Policy, 2005) and *Conservation in the Internet Age: Threats and Opportunities* (Island Press, 2002).

Levitt has served on the National Advisory Board of the Long-Term Ecological Research Program sponsored by the National Science Foundation, and is a member of the boards of several nonprofit conservation organizations, including the Massachusetts Audubon Society and QLF/Atlantic Center for the Environment. He has a B.A. from Yale College, with distinction in anthropology, and holds a Master's in Public and Private Management from the Yale School of Management. Contact: james_levitt@harvard.edu.

James N. Levitt

LAND LINES: *How did you become interested in the conservation of land and biodiversity, and in the subject of innovation among conservation practitioners?*

JIM LEVITT: As a boy growing up in Kansas City, I loved being outdoors on family trips to Arizona and Colorado, and at summer camps in Wisconsin and Maine. My interest in ecology intensified as a teenager in the late 1960s, during the emergence of the environmental movement. Then, as an anthropology major at Yale College, I had a chance to focus on the interaction of human cultures and the environment, and on how cultures can learn and change over time. Summer internships on the Burnt Church Indian Reserve in New Brunswick, Canada, reinforced my enthusiasm for what is today called sustainable development.

After college I worked in the U.S. Department of the Interior as a program assistant to the Alaska Task Force that helped to pass the Alaska National Interest Lands Act. This legislation protected more than 100 million acres of national parks and monuments, wildlife refuges, forests, and wild and scenic rivers, and still stands as the largest single conservation initiative in American history. I was able to watch leaders like Secretary of the Interior Cecil Andrus, Congressman Morris Udall, and the legendary activists Edgar and Peggy Wayburn realize conservation objectives that were both figuratively and literally monumental. I aspired to follow their examples and somehow, someday, make a significant contribution to the field of conservation.

Returning to the Yale School of Management as a graduate student, and in two subsequent decades as a management consultant advising corporate and public sector clients on strategy, I learned a great deal about how large organizations work, and about the complexity of achieving lasting change. Through service on nonprofit boards during the same period, I was able to stay current with trends in conservation practice.

When I had the opportunity to be a Fellow at the Taubman Center for State and Local Government at Harvard's Kennedy School in 1998, and subsequently to serve as coordinator of the Lincoln Institute's Conservation Leadership Dialogue (CLD) series, the two streams of interest in strategy and conservation merged into what has become nearly a decade of work on what I term "conservation innovation." It is an odd juxtaposition of almost contradictory terms, but I have learned that in conserving ancient places and ecosystems that we value, conservation practitioners are constantly called upon to come up with new ways of doing business—what I call "landmark conservation innovations."

LAND LINES: *Can you share some examples of landmark conservation innovations?*

JIM LEVITT: Such examples abound in the history of the United States, and throughout the world. They range from the protection of the Boston Common by self-governing Puritan settlers in 1634 to the establishment and growth in Kenya of the Greenbelt Movement, an effort led by Nobel Prize winner Wangari Maathai in the recent decades. These innovations involve such disparate fields as conservation science, education, advocacy, land protection (including project finance), and stewardship.

Typically, the most significant of these initiatives are characterized by five traits: *novelty*, indicating notable creativity in conception; *strategic significance*; measurable *effectiveness*; transferability or *replicability* from one jurisdiction or nation to another; and the *ability to endure*, leaving marks on professional practice and in land use atlases for decades and even centuries.

Consider the example of the U.S. national park system. When President Ulysses S. Grant established Yellowstone as a national park in 1872, setting aside about 1 million acres, it was the first and only national park in the world. (Abraham Lincoln had reserved Yosemite in 1864, but as a state park.) By the year 2000, nearly every nation in the world had established national parks, collectively covering nearly 1 billion acres—that is a thousand-fold increase in 128 years.

The creation of Yellowstone has proved to be highly creative, inspiring land protection efforts worldwide; strategically significant in the growth of the conservation movement; effective in both acres protected and lives enriched; and transferrable to every continent

on earth. Furthermore, the idea is still going strong today, with new parks and national monuments being created in recent years from Utah to Uruguay.

Similarly, the birth of the land trust movement in 1891, inspired by the effort to protect the magnificent trees known as the Waverley Oaks growing along Beaver Brook in eastern Massachusetts, has had global implications. The land trust movement has spread around the world, with vibrant private land conservation movements now taking root from Chile and the Czech Republic to New Zealand. It is humbling to see how, over the space of several generations, such organizations can become powerful forces for conservation. It is true that “great oaks do from little acorns grow.”

LAND LINES: *How do these examples inform us as we face the immense conservation challenges of this century, including global climate change?*

JIM LEVITT: The challenges we face are indeed immense. From inland drought to rising sea levels to the spread of invasive species, the warming of the earth’s climate may lead to some quite dire environmental consequences. For example, Jesse Logan, a biologist recently retired from the U.S. Forest Service, offers very specific scenarios of how pine beetles, once confined to the American West by frigid winter temperatures, may now spread devastation in pine forests across the North American continent due to winter warming in high latitudes.

Likewise, historic drought conditions in the Colorado River Basin threaten the water and power supplies throughout the southwestern U.S. And, however critical these problems might be for Americans, the changing hydrologic cycle in Bangladesh and India could lead to truly catastrophic threats to human and wildlife populations there.

LAND LINES: *Are these threats beyond the scope and ability of humankind to address?*

JIM LEVITT: I don’t believe so. At least three times in the past century in the United States, we have gathered our best minds and best spirit to forcefully address threats

to our natural resources and environment. During Theodore Roosevelt’s presidency, Gifford Pinchot was instrumental in creating the U.S. Forest Service, leading to the dramatic recovery of the nation’s forests.

Three decades later, under President Franklin Roosevelt, Hugh Hammond Bennett, founder of the Soil Conservation Service, finally helped us come to grips with the tragic consequences of the Dust Bowl. And in the 1960s and 1970s, inspired by Rachel Carson’s *Silent Spring*, we created the Environmental Protection Agency and the Endangered Species Act. Our children, who can now see bald eagles in substantial numbers in places where they had virtually disappeared, are the beneficiaries.

Certainly, to address the challenges of climate change and disruptive human impacts on the planet, we need new ideas, new tools, and new programmatic initiatives. We need *new energy technologies* that can help us very substantially reduce the release of greenhouse gases into the atmosphere. We need *enforceable regulations* that will control the release of carbon emissions on a global basis. We need *new markets*, such as carbon trading markets and wetland mitigation markets, that will unleash the remarkable power and creativity of private entrepreneurs to establish sustainable economies around the globe. And we need a comprehensive approach to *adaptive management* of working and protected landscapes and seascapes to help us cope with the changes in the climate and related ecosystem dynamics that are already being registered today.

LAND LINES: *How are you working with the Lincoln Institute to advance the conservation community’s thinking on these issues?*

JIM LEVITT: Through the Institute’s Conservation Leadership Dialogue process, we have already had heartening success in bringing conservation finance concepts to light with the publication of *From Walden to Wall Street*, which was principally aimed at opportunities in the United States.

This year’s meeting, being held in Washington, DC, in May, will focus on a framework for adaptive management that employs cross-sectoral cooperation at

multiple scales to (1) observe, (2) forecast and plan, (3) take action on the ground, and (4) reassess the efficacy of those actions. The creation of a comprehensive, international system of adaptive land management would, if accomplished, constitute a landmark conservation innovation of considerable historic importance.

In January 2009, we plan to hold a CLD session on Conservation Capital in the Americas on the campus of the Universidad Austral de Chile, in the beautiful riverfront city of Valdivia. We hope to engage conservationists from both North and South America at the meeting, and to publish a book based on the productive exchange of ideas.

LAND LINES: *How will innovation in the field of conservation finance make a difference in this effort?*

JIM LEVITT: At the end of the day—or, perhaps better said, at the beginning of the day—we will need historic levels of funding, from the public sector as well as private markets, to bring to life the ideas that are big and bold enough to substantially address the threat of global warming.

The good news is that the field of conservation finance is brimming with new and highly promising ideas that have been tested and are ready for deployment. These include: provision of debt and equity finance for limited development projects; the establishment of ecosystem service markets to mitigate the impacts of development on soil, water, and wildlife resources; the establishment of global carbon trading markets that can reward actors that find effective ways to reduce greenhouse gas emissions; the use of tax incentives that encourage individuals and businesses to protect private land for the public benefit; and the implementation of micro-finance and growth finance facilities that can unleash the entrepreneurial energies of people around the world to achieve their sustainable development goals.

It is an exciting time to be involved in conservation finance. The Washington, DC, and Valdivia conferences should add to the global momentum in this field. **L**