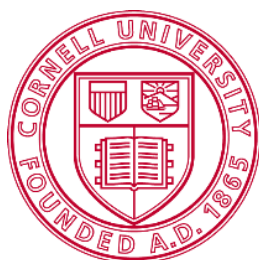


# ANNUAL REPORT 2012

## Human Dimensions Research Unit



**Cornell University**

Department of Natural Resources  
Human Dimensions Research Unit

Bruckner Hall  
Ithaca, NY 14853

<http://www.dnr.cornell.edu/hdru>

# ANNUAL REPORT 2012

## Human Dimensions Research Unit

Department of Natural Resources  
College of Agriculture and Life Sciences  
Cornell University

### PURPOSE

This 2012 annual report provides an overview of recent research, teaching, and outreach activities of the Human Dimensions Research Unit (HDRU). The report is designed to reflect the work, interests, and capabilities of the HDRU. Publications listed in this report may be requested by emailing [HDRU@cornell.edu](mailto:HDRU@cornell.edu) or by going to the HDRU website at:

<http://www.dnr.cornell.edu/hdru>



### MISSION

The HDRU strives to expand the understanding of academicians, students, natural resources agency staff, non-governmental organizations and policy makers about the human dimensions of natural resource management and policy by studying human attitudes, values and behaviors associated with natural resource management and applying theory and empirical findings to real-world, contemporary problems. Our research outcomes, which include empirical data, conceptual frameworks, and theoretical insights, are reported at conferences and in journals, books, policy briefs, outreach publications, and reports of various types. HDRU research is used by a wide array of decision makers and natural resource practitioners, especially those in state and federal agencies, to develop, implement, and evaluate natural resource policies and management approaches.

HDRU faculty and staff contribute to the teaching and outreach functions of the College of Agriculture and Life Sciences and the Department of Natural Resources. We advise both undergraduate and

graduate students, and teach courses concerning natural resources policy and management. While all HDRU faculty and academic staff engage in outreach, two of our faculty also have Extension appointments, from which we serve citizens of New York State and beyond. In 2009, an HDRU Outreach series was developed to facilitate sharing of research findings in non-technical form.

### DESCRIPTION

During 2012, the core HDRU and cooperators consisted of dozens of faculty, staff, graduate assistants, and undergraduate student technicians. Research and outreach programs are supported by grants and contracts from federal and state agencies, nongovernmental organizations, foundations, Cornell Cooperative Extension, and the Cornell University Agricultural Experiment Station. For 2012, grants and contracts for the 5 primary HDRU faculty totaled \$5,222,825.

HDRU graduate faculty have membership in the fields of Natural Resources, Development Sociology, Public Affairs, and Water Resources. In 2012, graduate faculty committee members for HDRU graduate students came from a variety of departments: Communication, Design and Environmental Analysis, Development Sociology, City and Regional Planning, Natural Resources and others. Our program's primary geographic focus is domestic, but includes some international work.

The HDRU has earned an international reputation in the development of the human dimensions specialization of natural resource management. The oldest human dimensions unit of its kind, the HDRU's history dates from the early 1970s. The success of the HDRU has been greatly enhanced by a partnership of approximately 35 years with the NYS Department of Environmental Conservation's division of Fish, Wildlife, and Marine Resources and a number of federal and state partners.

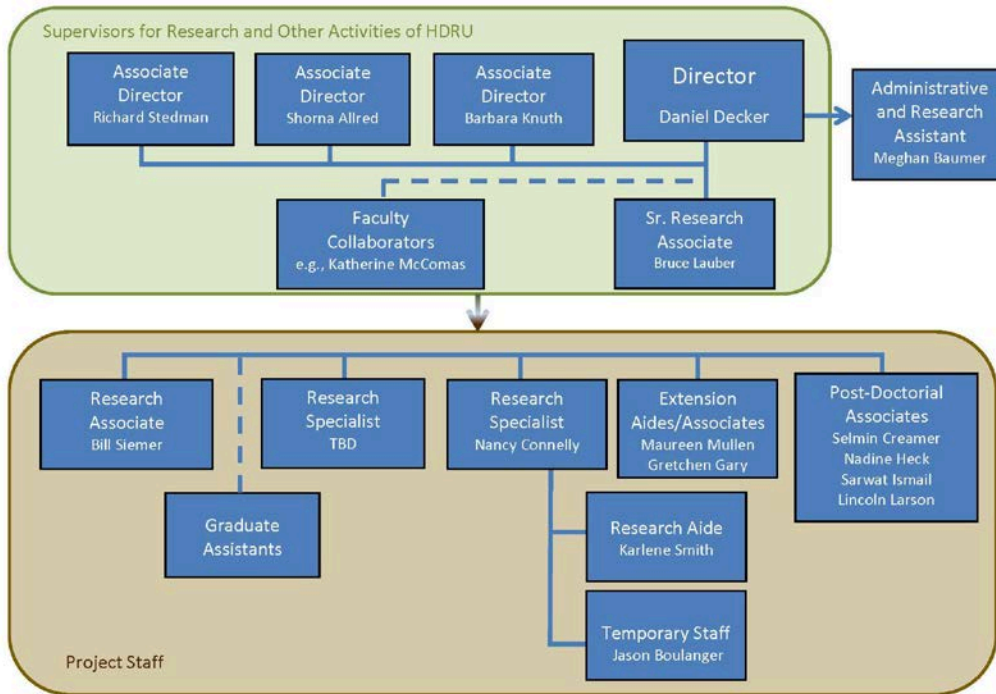


Figure 1: Human Dimensions Research Unit Organizational Chart

### % of Overall HDRU Funding

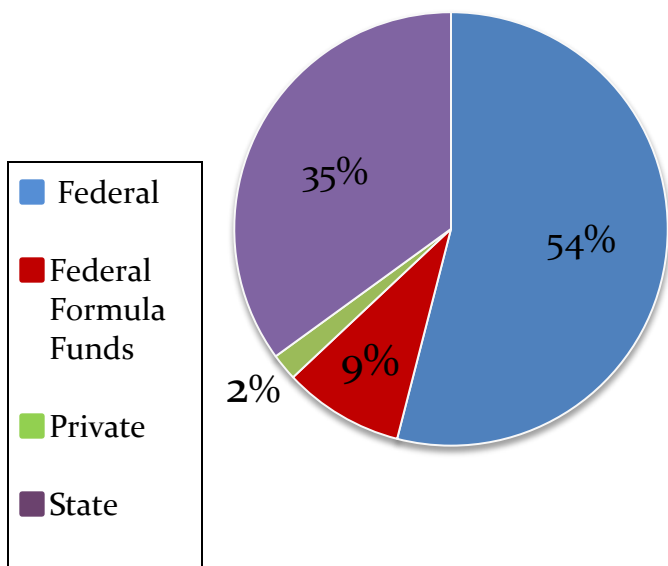


Figure 2: HDRU total funding from sponsored projects that were active in 2012 (grants and contracts totaled \$5,222,825).

The funding for HDRU research comes from multiple sources including competitive grants and contracts. In 2012, the following funders contributed to our work:

- Atkinson Center for Sustainable Future
- Audubon New York
- Canadian Forest Service
- Cornell Center for Sustainable Future
- Cornell Cooperative Extension
- Cornell University Agricultural Experiment Station
- Great Lakes Fishery Commission
- Ittleson Foundation, Inc.
- Minnesota Department of Health
- National Oceanic and Atmospheric Administration
- National Park Service
- National Science Foundation
- New York Sea Grant
- New York Water Resources Institute
- Northeast States Research Cooperative
- NYS Department of Environmental Conservation
- Pennsylvania Bureau of Forestry
- Social Science and Humanities Research Council
- Texas A&M University
- The Garden Club of America
- Toward Sustainability Foundation
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service

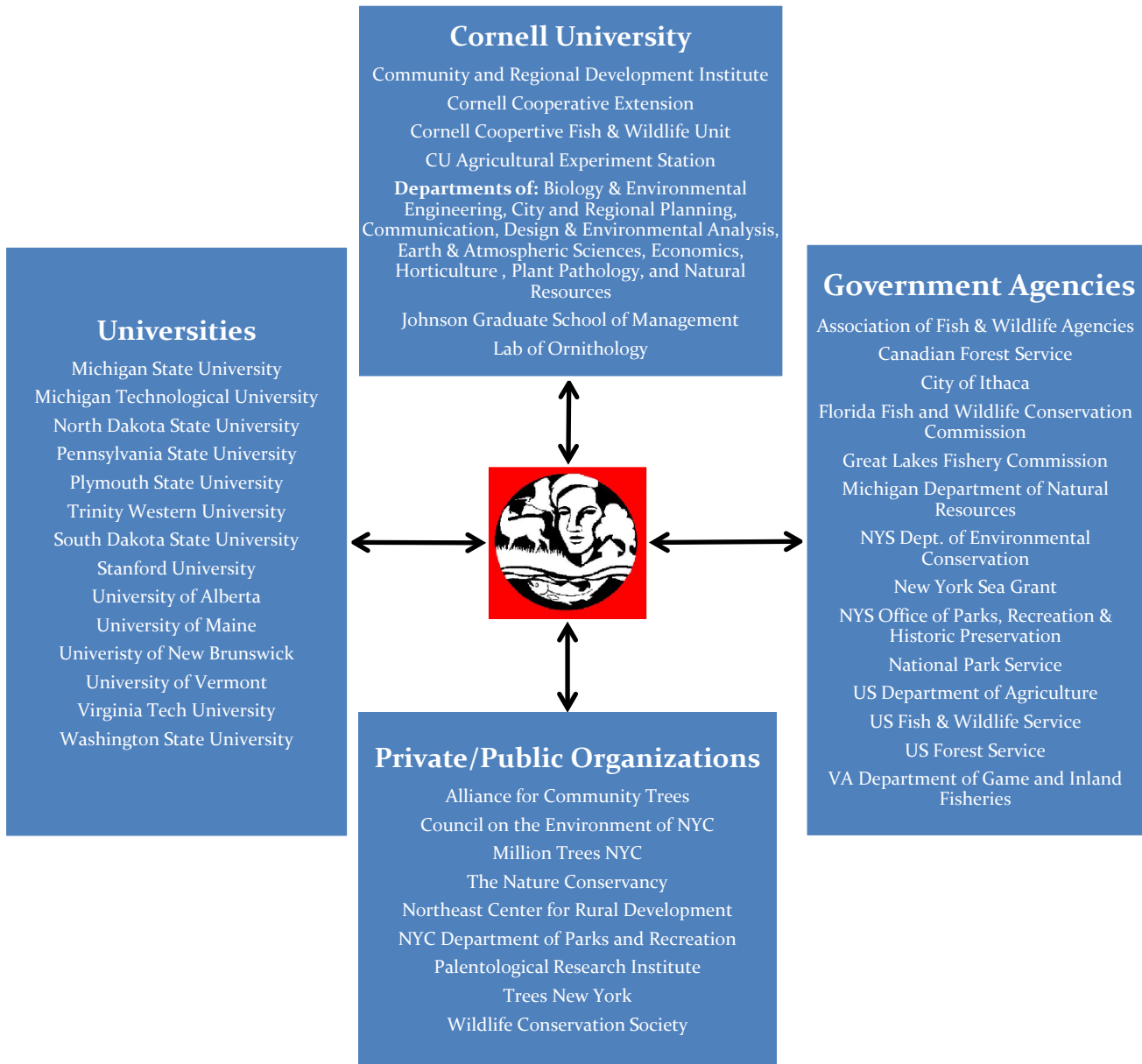


Figure 3: HDRU collaborates with a wide variety of organizations, universities, and governments (recent examples listed above). Without the assistance of these and other collaborators, much of the work would not be possible.

## FACULTY AND STAFF

### UNIT FACULTY:

**Shorna Broussard Allred**, Associate Professor and Unit Associate Director

*Specializations:* Human dimensions of natural resource management; natural resource policy; environmental attitudes and behavior with emphasis on forest and water resources.

**Paul D. Curtis**, Associate Professor and Extension Wildlife Specialist, Dept. Natural Resources

*Specializations:* Resolving conflicts between people and wildlife; citizen participation in decision making; outreach and policy education.

**Daniel J. Decker**, Professor and Unit Director

*Specializations:* Integration of human dimensions insights into wildlife management decision making, policy, planning, and practice; stakeholder involvement in wildlife management; community-based natural resources management; risk perception and communication related to wildlife management.

**Barbara A. Knuth**, Professor and Unit Associate Director; Vice Provost and Dean of the Graduate School

*Specializations:* Integrating human dimensions into natural resources decision making; risk management and communication related to contaminants in fish; Great Lakes and marine resource policy and management.

**Heidi Kretser**, Adjunct Assistant Professor, Livelihoods & Conservation Coordinator for the N. America Program Wildlife Conservation Society

*Specializations:* Land-use development and patterns; how human activities in rural landscapes influence wildlife and human-wildlife conflicts; how communities, groups of actors in a conservation issue, or a single organization move from process and discussion of an issue to on-the-ground conservation impacts.

**T. Bruce Lauber**, Senior Research Associate

*Specializations:* Conflict and collaboration in natural resource management; citizen participation in decision making; outreach and policy education; invasive species management.

**Katherine A. McComas**, Associate Professor, Department of Communication

*Specializations:* Risk, science, and environmental communication; community involvement and public participation; trust and credibility related to science communication.

**Richard C. Stedman**, Associate Professor and Unit Associate Director

*Specializations:* Sense of place; community resilience; impacts of social and environmental change on wildlife recreation and community; risk and policy; environmental attitudes and behaviors; community-based resource management; landowner attitudes and behaviors; coupled human/ecological systems.

### 2012 HDRU Publications:

33 Peer-reviewed Publications in Print/Press

4 HDRU Research Reports

6 Training/Outreach Publications

### UNIT STAFF:

**Meghan S. Baumer**, Administrative/Research Assistant

*Specializations:* Environmental psychology, environmental education, volunteer management, unit office management; website maintenance; administrative assistance.

**Jason R. Boulanger**, Extension Associate

*Specializations:* Human dimensions of hunter subgroups human-wildlife conflicts, wildlife disease, and geographic information systems.

**Nancy A. Connelly**, Research Specialist

*Specializations:* Incorporating human dimensions perspectives in natural resources management; risk perception and communication related to fisheries management; survey research methods.

**Caren Cooper**, Research Associate at the Cornell Lab of Ornithology

*Specializations:* Links between nature-based recreation and natural resource management, links between public participation in scientific research (Citizen Science) and conservation attitudes, intentions, and behaviors.

**Gretchen Gary**, Extension Associate

*Specializations:* Interdisciplinary research, invasive species, climate change, natural resource management, outreach and education.

**Maureen Mullen**, Communications Outreach Coordinator/Extension Aide

*Specializations:* Organizing and implementing workshops and courses in conservation-related topics; human disturbance and species distribution correlations; geographic information systems; database management.

**William F. Siemer**, Research Associate

*Specializations:* Motivations and satisfactions associated with wildlife-dependent recreation; educational program evaluation; risk perceptions associated with wildlife-related damage and disease transmission; mass media effects on risk perception.

**Karlene K. Smith**, Research Aide

*Specializations:* Survey implementation; interviewing; database management; content analysis.

## POSTDOCTORAL RESEARCHERS:

**Selmin Creamer**, Postdoctoral Research Associate

*Specializations:* Forest economics; social and economic dimensions of natural resources.

**Nadine Heck**, Postdoctoral Research Associate

*Specializations:* Marine conservation; social dimensions of fisheries; ocean/aquatic governance; environmental decision-making.

**Sarwat Ismail**, Postdoctoral Research Associate

*Specializations:* Plant Ecology; mangrove ecosystems; heavy metal pollution; conservation ecology.

**Lincoln Larson**, Postdoctoral Research Associate

*Specializations:* Community-based natural resource management, environmental attitudes and behaviors, outdoor recreation, environmental education, sustainable tourism, park management.

## GRADUATE ASSISTANTS:

**Ingrid Biedron**, Graduate Assistant

*Specializations:* Human dimensions of marine ecosystem-based management; the influence of social factors on regional fishery management council adoption of ecosystem-based fisheries management.

**Christopher Clarke**, Graduate Assistant

*Specializations:* Health and environmental communication; risk perception; wildlife disease.

**Ashley Dayer**, Graduate Assistant and Land-Grant Fellow

*Specializations:* Human dimensions of forest management for wildlife, persuasion, wildlife values, environmental education and strategic communications.

**Stephen Decker**, Graduate Assistant

*Specializations:* Human dimensions of large herbivore restoration and management, integrated approaches to wildlife management in Newfoundland and Labrador, Canada.

**Darrick Evensen**, Graduate Assistant and EPA Star Fellow

*Specializations:* Risk perception and risk communication of environmental hazards; social representations of energy development, with a focus on unconventional natural gas development.

**Jim Goetz**, Graduate Assistant

*Specializations:* Ecology and conservation of the Golden Swallow, *Tachycineta euchrysea*.

**Darragh Hare**, Graduate Assistant

*Specializations:* Natural resource policy and governance; public trust doctrine; environmental ethics; interdisciplinarity.

**Heather Wieczorek Hudenko**, Graduate Assistant

*Specializations:* Human-wildlife interactions; communication; risk; human behavior and decision making; wildlife conservation and management.

**Micah Ingalls**, Graduate Assistant

*Specializations:* Community-based natural resource management and social-ecological resilience.

**Jeffrey Jacquet**, Graduate Assistant

*Specializations:* Energy development and economic and social impact analysis.

**Ted Lawrence**, Graduate Assistant

*Specializations:* International development and natural resource conservation in Latin America, specifically Yucatan, Mexico; Coupled human and natural systems; Common-pool resource regimes; Landscape ecology and eco-agriculture.

**Yue Li**, Graduate Assistant

*Specializations:* Environmental education; evaluation of online courses for environmental educators.

**Josephine Martell**, Graduate Assistant

*Specializations:* Human-wildlife interactions; public policy and legislation; humane wildlife management; understanding how classifications can stigmatize wildlife; developing stakeholder communications tools and processes.

**Christine Moskell**, Graduate Assistant and EPA Star Fellow

*Specializations:* Community engagement in urban forestry; urban forest governance, stakeholder engagement.

**Rachel Neugarten**, Graduate Assistant

*Specializations:* Environmental and socioeconomic evaluation of forest management.

**Rachel Parks**, Graduate Assistant

*Specializations:* Communications, environmental policy, species of special concern and endangered species.

**Nirav Patel**, Graduate Assistant

*Specializations:* Role of community perception, specifically the attitudes of educators and students towards Renewable Energy Systems and its impact on assessing Renewable Energy Literacy.

**Emily Pomeranz**, Graduate Assistant

*Specializations:* stakeholder engagement and collaboration in tourism and wildlife management.

**Laura Rickard**, Graduate Assistant

*Specializations:* Science, risk, and health communication; public understanding of science and risk; examining formal and informal processes of risk management and communication in national parks.

**Santi Saypanya**, Graduate Assistant

*Specializations:* Conservation education and outreach program development and evaluation.

**Timothy Shaffer**, Graduate Assistant

*Specializations:* Community engagement on natural resource and community development issues; public deliberation program development.

**Carrie Simon**, Graduate Assistant

*Specializations:* Human dimensions of ecosystem-based management; institutional theory; adoption of environmental management plans.

**In 2012 HDRU had:**  
8 Faculty Members  
8 Staff Members  
4 Postdoctoral Researchers  
22 Graduate Students  
9 Undergraduate Researchers

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# Summary of 2012 Research Activities

## Wildlife Resources Management and Policy

### Public Involvement in Wildlife Management

Communities across the country have increasingly called for wildlife management solutions tailored to their particular situations, especially with respect to human-wildlife conflicts. In addition to seeking involvement in defining problems, goals, objectives, and methods, some communities have expressed willingness to share responsibility for implementing management. For community-based management to be effective, community capacity often needs to be adequate. Recent studies have made substantial progress in defining the relevant elements of community capacity and exploring social learning that occurs as communities work with state agencies on local wildlife problems. Other research is examining stakeholder interests and how various groups attempt to use the political process to achieve these wildlife management goals.

**HDRU Contact:** Barbara Knuth  
([bak3@cornell.edu](mailto:bak3@cornell.edu))

**Publications:**

Triezenberg, H.A., T.B. Lauber, and B.A. Knuth. 2012. Policy learning and deer co-management in New York State: Insights from newspaper coverage. *Journal of Wildlife Management*. 76(6):1317-1325.

Triezenberg, H.A., B.A. Knuth, Y.C. Yuan, and J.L. Dickinson. 2012. Internet-based social networking and collective action models of citizen science: Theory meets possibility. Chapter 15 in J.L. Dickinson and R. Bonnery, eds. *Citizen Science: Public Collaboration in Environmental Research*. Cornell University Press, Ithaca, NY.

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### Sustaining and Improving Hunting and Trapping in New York: Public Attitudes, Conflict Resolution, and Political Activism

**Funded by:** New York State Department of Environmental Conservation and Cornell University Agricultural Experiment Station

**Collaborators:** Y. Connie Yuan (Dept. of Communication), Janis L. Dickinson (Dept. of Natural Resources), John F. Forester (Dept. of City and Regional Planning), Gordon Batcheller and Bryan Swift (NYSDEC Bureau of Wildlife)

**Investigators:** Barbara Knuth, Bruce Lauber, and Heather Triezenberg



HDRU Graduate Student Ted Lawrence at an interview during a traditional Mayan meal in Mexico.

## Program Assessments and Evaluations

Natural resource management agencies increasingly seek formal assessments before establishing new programs or modifying existing programs. They also periodically evaluate ongoing programs. HDRU research staff bring diverse disciplines to bear on program assessments and utilize a comprehensive evaluation strategy that examines program theoretical foundation, design, implementation, and impacts. We apply this approach as needed and identify elements that facilitate or impede program success or failure. Such evaluation allows resource managers and program directors to make better decisions about program design, modification and continuation and also to determine the impacts of programs.

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### Civic Conservation Recreation

**Funded by:** Cornell University Agricultural Experiment Station, Multi-state Hatch Funds

**Collaborators:** Paul Curtis and Jay Boulanger

**Investigators:** Marianne Krasny, Daniel Decker, Richard Stedman, William Siemer, and Keith Tidball

**HDRU Contact:** William Siemer  
([wfs1@cornell.edu](mailto:wfs1@cornell.edu))

**Publication:**

Siemer, W. F., D. J. Decker, and Richard C. Stedman. 2012. Cornell University lands deer hunting program: Profile of active participants in 2011. Human Dimensions Research Unit Series Publication 12-4. Ithaca, NY: Cornell University, Department of Natural Resources.

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### Assessing Agency Capacities to Manage Fish and Wildlife Health

**Funded by:** U.S. Fish and Wildlife Service, Wildlife Restoration and Sport Fish Restoration

**Collaborators:** Bob Duncan (VA Dept. of Game and Inland Fisheries), Collin Gillin (OR Dept. of Fish and Wildlife), Gary Taylor (Assoc. of Fish and Wildlife Agencies), Gary Whelan (MI Dept. of Natural Resources), David Whitehurst (VA Dept. of Game and Inland Fisheries), and Margaret Wild (National Park Service).

**Investigators:** Bruce Lauber, Daniel Decker, Shawn Riley (Michigan State University), and William Siemer

**HDRU Contact:** William Siemer  
([wfs1@cornell.edu](mailto:wfs1@cornell.edu))

**Publications:**

Siemer, W. F., T. B. Lauber, D.J. Decker, and S. J. Riley. 2012. Agency traits that build capacity to manage disease. Human Dimensions of Wildlife. 17(5): 376-388.

Decker, D. J., W. F. Siemer, D. T. N. Evensen, R. C. Stedman, K. A. McComas, M. A. Wild, K. T. Castle, and K. M. Leong. 2012. Public perceptions of wildlife-associated disease: risk communication matters. Human-Wildlife Interactions. 6(1):112-122.

Siemer, W. F., T. B. Lauber, D. J. Decker, and S. J. Riley. 2012. Building capacity to address disease threats: Clues from a study of state wildlife agencies. North American Wildlife & Natural Resources Conference 77: In press.

Siemer, W. F., T. B. Lauber, D. J. Decker, and S. J. Riley. 2012. Agency capacities to detect and respond to disease events: 2011 national survey results. Human Dimensions Research Unit Series Publication 12-1. Ithaca, NY: Cornell University, Department of Natural Resources.

**Presentations:**

Siemer, W. F., T. B. Lauber, D. J. Decker, and S. J. Riley. 2012. Building capacity to address disease threats: Clues from a study of state wildlife agencies. 77<sup>th</sup> North American Wildlife & Natural Resources Conference, Atlanta, GA, March 2012.

Lauber, T.B., W.F. Siemer, D.J. Decker, and S.J. Riley. 2012. Agency capacity for detecting and responding to fish disease. American Fisheries Society Annual Meeting. St. Paul, MN. August 2012.

## Understanding Attitudes and Values of Wildlife Stakeholders

### **Developing Knowledge to Manage Economic, Health, and Safety Risks of Wildlife for Individuals and Communities in New York**

**Funded by:** Cornell University Agricultural Experiment Station and New York State Department of Environmental Conservation (NYSDEC)

**Collaborator:** Gordon Batcheller (NYSDEC)

**Investigators:** Daniel Decker and William Siemer

**HDRU Contact:** William Siemer ([wfs1@cornell.edu](mailto:wfs1@cornell.edu))

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### **Landowner Attitudes toward Early Successional Habitat in New York**

**Funded by:** New York State Department of Environmental Conservation (NYSDEC)

**Collaborators:** Mike Wasilco, Mark Kandel, Tom Bell, Paul Novak, and Matt Swayze (NYSDEC)

**Investigators:** Shorna Allred, Richard Stedman, Daniel Decker, and Ashley Dayer

**HDRU Contact:** Ashley Dayer ([aad86@cornell.edu](mailto:aad86@cornell.edu))

### **Publications:**

New England Cottontail Outreach Working Group [including Dayer, A. & Allred, S.]. (2012). *New England Cottontail Outreach Communications Strategy: An Outreach Plan to Help Partners Implement the Conservation Strategy for the New England Cottontail*. Accessible at: [www.newenglandcottontail.org](http://www.newenglandcottontail.org).

### **Presentations:**

Dayer, A.A., Allred, S., & Stedman, R.C. (2012, September 25). "Developing Strategies to Encourage Private Forest Landowner Participation in Early Successional Forest Habitat Management," Pathways to Success: Human Dimensions of Wildlife, Breckenridge, Colorado.

Dayer, A.A., Allred, S., Stedman, R.C., Wasilco, M., & Kandel, M. (2012, April 27). "Southern Tier Landowners' Management for Early Successional Forest Habitat," Annual Meeting of the New York State Fish and Wildlife Management Board, Cortland, New York.

Dayer, A.A. (2012, April 17). "Advancing the Study of Landowner Behavior: Understanding Participation in Forest Management Activities that Support Wildlife Habitat," Cornell University Department of Natural Resources Seminar Series, Ithaca, New York.

Dayer, A.A., Allred, S., Stedman, R.C., Rosenberg, K. (2012, February 27). "Beyond Ecologically Sound Conservation Targets: Bridging the Implementation Gap through a Focus on How to Conserve [poster]," The Second Emerging Issues Conference of the Ecological Society of America, Shepherdstown, West Virginia.

Dayer, A.A., Allred, S., Stedman, R., Wasilco, M., Kandel, M. (2012, January 18). ESH and Private Landowners in New York State: Workshop Results. Bi-annual meeting of the Bureau of Wildlife Managers, Hamilton, New York.

---

### **Hunter Recruitment and Retention in New York State**

**Funded by:** New York State Department of Environmental Conservation (NYSDEC)

**Collaborators:** Gordon Batcheller, Mike Schiavone, Chuck Dente, Mike Wasilco, Ken Baginski, and Melissa Neely (NYSDEC)

**Investigators:** Daniel Decker, William Siemer, Richard Stedman, Lincoln Larson, and Meghan Baumer

**HDRU Contact:** Lincoln Larson  
([lrl66@cornell.edu](mailto:lrl66@cornell.edu))

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### **Limiting Bird Damage to Fruit Crops: Integrating Economic, Biological, and Consumer Information to Determine Testable Management Strategies for the Future**

**Funded by:** U.S. Department of Agriculture, National Institute of Food and Agriculture, Specialty Crop Research Initiative (SCRI) grant

**Collaborators:** Catherine Lindell (Michigan State University); Stephanie Shwiff (USDA-APHIS, National Wildlife Research Center); Paul Curtis and Jay Boulanger

**Investigators:** Catherine Lindell, Philip Howard, and Chi-Ok Oh (Michigan State University); Stephanie Shwiff, (USDA-APHIS, National Wildlife Research Center); Paul Curtis and Jay Boulanger (Cornell DNR); Juliet Carroll, (Dept. of Plant Pathology), Karen Steensma (Trinity Western University); George Linz (USDA-APHIS and North Dakota State University); Erin Lizotte and Nikki Rothwell (Michigan State University Extension); and Colleen Burrows (Washington State University Extension)

**HDRU Contact:** William Siemer  
([wfs1@cornell.edu](mailto:wfs1@cornell.edu))

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### **New York Turkey Hunter Traits and Regulation-Related Satisfactions**

**Funded by:** New York State Department of Environmental Conservation (NYSDEC)

**Collaborators:** Mike Schiavone, Lance Clark, Jeff Eller, Pat Vissering, Emilio Rende, and Sandy Chan (NYSDEC); Angela Fuller and Mitch Eaton (Cornell Coop Unit)

**Investigators:** Daniel Decker, William Siemer, Jay Boulanger, and Meghan Baumer

**HDRU Contact:** William Siemer  
([wfs1@cornell.edu](mailto:wfs1@cornell.edu))

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### **One Health and Wildlife Conservation**

**Funded by:** National Park Service (NPS)

**Collaborators:** Margaret Wild, Danielle Buttke, Kevin Castle, and Kirsten Leong (NPS)

**Investigators:** Daniel Decker, Richard Stedman, and Katherine McComas (Dept. of Communication)

**HDRU Contact:** Daniel Decker ([djd6@cornell.edu](mailto:djd6@cornell.edu))

#### **Publications:**

Siemer, W. F., T. B. Lauber, D.J. Decker, and S. J. Riley. 2012. Agency traits that build capacity to manage disease. *Human Dimensions of Wildlife*, 17(5): 376-388.

Evensen, D.T., Decker, D.J., and R.C. Stedman. 2012. Shifting reactions to risks: a case study. *Journal of Risk Research*. 1-16.

Decker, D.J., W.F. Siemer, D.T.N. Evensen, R.C. Stedman, K.A. McComas, M.A. Wild, K.T. Castle, and K.M. Leong. 2012. Public Perceptions of Wildlife-associated Disease: Risk Communication Matters. *Human-Wildlife Interactions* 6(1):112-122.

Evensen, D.T.N., D.J. Decker, and K. T. Castle. 2012. Communicating about Wildlife-associated Disease Risks in National Parks. *The George Wright Forum* 29(2): 227-235

**Presentation:**

Decker, D.J. 2012. The role of One Health in wildlife conservation. Annual Conference of The Wildlife Society, Portland, OR. (October 2012). (Invited plenary)

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**Understanding the Human Dimensions of Human-Wildlife Habituation: Developing Knowledge for Interventions to Foster Positive Interactions between People and Wildlife**

**Funded by:** National Park Service

**Collaborators:** Dr. Kirsten Leong (Biological Resources Management Division, National Park Service) and Bruce Connery (Acadia National Park, National Park Service Habituation Steering Committee)

**Investigators:** Daniel Decker and Heather Wieczorek Hudenko

**HDRU Contact:** Heather Wieczorek Hudenko ([hah29@cornell.edu](mailto:hah29@cornell.edu))

**Publications:**

Wieczorek Hudenko, H. (2012). Exploring the influence of emotion on human decision making in human-wildlife conflict. *Human Dimensions of Wildlife* 17(1): 16-28.

Wieczorek Hudenko, H., and K. Leong. Human-Wildlife Habituation in National Parks. (in prep).

**Presentation:**

Leong, K., Decker, D., and L. Barish. "Applying knowledge of human and wildlife learning and behavior to wildlife management in the National Park Service." Human Dimensions Conference, Breckenridge, CO. (September 2012).

---

**Human Dimensions of Wildlife Disease: Understanding Perceptions of Risk and Identifying Implications for Developing Effective Communication Messages**

**Funded by:** National Park Service and Cornell University Agricultural Experiment Station

**Collaborators:** Margaret Wild, Kevin Castle, and Kirsten Leong (National Park Service)

**Investigators:** Daniel Decker, Richard Stedman, William Siemer, Darrick T.N. Evensen, Laura Rickard, Christopher Clarke, and Katherine McComas (Dept. of Communication)

**HDRU Contact:** Daniel Decker ([djd6@cornell.edu](mailto:djd6@cornell.edu))

**Publication:**

Rickard, L.N., McComas, K.A., Clarke, C.E., Stedman, R.C., and Decker, D.J. 2012. Exploring risk attenuation and crisis communication after a plague death in Grand Canyon. *Journal of Risk Research*, 1-23.

## **Fisheries Resources Management and Policy**

### **Understanding Participation, Attitudes, and Values Associated with Fisheries Management**

Many stakeholders with diverse interests are affected by fisheries management decisions and activities. Understanding the attitudes and values of these stakeholders toward management is a base for predicting not only the acceptability of various

management strategies, but also the likely impacts that will be produced through management programs. This information is useful to fisheries agencies, and also to communities and marine trades groups who wish to improve marketing of

the fisheries resources of their localities and regions.

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**Building Capacity for Outreach to Recreational Users on Aquatic Invasive Species**

**Funded by:** U.S. Environmental Protection Agency

**Collaborators:** David MacNeill and Chuck O'Neill (New York Sea Grant); and Donald Zelazny (New York State Department of Environmental Conservation)

**Investigators:** Bruce Lauber, Richard Stedman, Nancy Connelly, Ingrid Biedron

**HDRU Contact:** Bruce Lauber ([tbl3@cornell.edu](mailto:tbl3@cornell.edu))

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**Factors Influencing the Transition to Ecosystem-based Fisheries Management- Importance of Fishery Management Council Interests, Representation, Power and Communication**

**Funded by:** Cornell University Agricultural Experiment Station and the J.P.Morgan Chase Dolores Zohrab Liebmann Fellowship (2009-2012).

**Collaborators:** Katherine A. McComas (Dept. of Communication), Patrick J. Sullivan (Dept. Natural Resources), and Arthur L. Wilson (Dept. of Education)

**Investigators:** Barbara Knuth, Nancy Connelly, Karlene Smith, and Ingrid Biedron

**HDRU Contact:** Ingrid Biedron ([ib49@cornell.edu](mailto:ib49@cornell.edu))

**Presentation:**

AFS Annual meeting; St. Paul, MN. August 20-23, 2012. Presentation: *Social Influences on Adoption of Ecosystem-based Fisheries Management in Marine Systems: Potential Relevance for Great Lakes Fisheries.*



Self portrait of Ingrid Biedron at the New England Fishery Management Council meeting in Plymouth, MA September 2012.

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**Increasing the Effectiveness of Fish Consumption Advisories in the Great Lakes States**

**Funded by:** Minnesota Department of Health and U.S. Environmental Protection Agency

**Investigators:** Barbara Knuth, Bruce Lauber, Jeff Niederdeppe (Dept. of Communication), and Nancy Connelly

**HDRU Contact:** Nancy Connelly ([nac4@cornell.edu](mailto:nac4@cornell.edu))

**Publication:**

Connelly, N. A., T. B. Lauber, J. Niederdeppe, and B. A. Knuth. 2012. Factors affecting fish consumption among licensed anglers living in the Great Lakes region. HDRU Publ. No. 12-3. Dept. of Nat. Resour., N.Y.S. Coll. Agric. and Life Sci., Cornell Univ., Ithaca, N.Y. 78 pp.

**Presentation:**

Connelly, N. A., B. A. Knuth, J. Niederdeppe, and T. B. Lauber. 2012. Factors influencing fish consumption among anglers living in the Great Lakes region. Paper presented at the 142th Annual Meeting of the American Fisheries Society, St. Paul, MN, Aug. 19-23.

---

**Pathogens and Invasive Species in the Great Lakes: Understanding Manager and Stakeholder Responses**

**Funded by:** Great Lakes Fishery Commission

**Investigators:** Bruce Lauber, Barbara Knuth, Richard Stedman, Nancy Connelly, and Nadine Heck

**HDRU Contact:** Bruce Lauber ([tbl3@cornell.edu](mailto:tbl3@cornell.edu))

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**Recreation Impacts of Aquatic Nuisance Species to the Great Lakes and Mississippi River Basins**

**Funded by:** U.S. Army Corps of Engineers

**Investigators:** Bruce Lauber, Richard Stedman, Gregory Poe (Dept. of Economics), Nancy Connelly, Richard Ready (Pennsylvania State University), and Selmin Creamer

**HDRU Contact:** Bruce Lauber ([tbl3@cornell.edu](mailto:tbl3@cornell.edu))

**Presentation:**

Stedman, R.C. 2012. "Interdisciplinary to the Corps:" Understanding multi-basin impacts and management of aquatic invasive species. Paper presented at the *75th Annual Meetings of the Rural Sociological Society*. July 26-29, Chicago, IL.

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**Strengthening Relationships and Communication between Marine Recreational Fishing Stakeholders and Regulating Agencies**

**Funded by:** New York Sea Grant

**Collaborators:** Patricia Riexinger (NYSDEC)

**Investigators:** Meghan Baumer and Kathy Bunting-Howarth (NY Sea Grant)

**HDRU Contact:** Meghan Baumer ([msb336@cornell.edu](mailto:msb336@cornell.edu))

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**Evaluation of New York State Anglers**

**Funded by:** New York Department of Environmental Conservation (NYSDEC), Bureau of Fisheries

**Collaborators:** Shaun Keeler and Jeff Loukmas (NYSDEC)

**Investigators:** Barbara Knuth and Nancy Connelly

**HDRU Contact:** Nancy Connelly ([nac4@cornell.edu](mailto:nac4@cornell.edu))

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**Other Publications and Presentations on Fisheries Resources Management and Policy:**

Knuth, B.A., T.L. Brown, and K.M. Hunt. In press. Measuring the human dimensions of recreational fisheries. Chapter 21 in T. Sutton, D. Parrish, and A. Zale, eds. *Fisheries Techniques*, 3<sup>rd</sup> edition. American Fisheries Society, Bethesda, MD.

Knuth, B.A. 2012. The value of social sciences for achieving the Sea Grant Mission. Keynote Address. Sea Grant Association Biennial Meeting, Girdwood, AK. September 2012.

Knuth, B.A. 2012. Expanding the reach of fisheries science and management through strategic social networking. Plenary Address. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, MN. August 2012.

Knuth, B.A. 2012. Communicating fish consumption risks to the public: Lessons from U.S. fish consumption health advisory programs. The Accidents at Fukushima Dai-ichi. Exploring the Impacts of Radiation on the Ocean. University of Tokyo, Tokyo, Japan. November 2012.

# Forest Lands Management

The HDRU has developed a continuous research thrust in the human dimensions of forest management. Examples include examining community collaboration in forest management and public awareness of, and attitudes toward, a range of forest management practices that enhance ecosystem management. In recent years we have engaged in a statewide survey of private forest owners in New York State and also studied human dimensions aspects of urban forests. Much of our applied research related to forest management has implications for Extension programs, thus we are continuing our close working relationship with Cornell Cooperative Extension.

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## Communicating Effectively for Enhanced Woodland Sustainability

**Funded by:** U.S. Forest Service

**Collaborators:** Shorna Allred, Peter Smallidge, Gary Goff, Christine Moskell, and Maureen Mullen

**Investigators:** J. Finley, A. Muth, and A. Metcalf (Penn State University)

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Presentation:**

Muth, A., Allred, S., Metcalf, A., Smallidge, P., Goff, G., Finley, J., and C. Moskell. 2012. Communicating Effectively for Enhanced Woodland Sustainability. *Annual Natural Resources Extension Professionals Conference*, Hendersonville, NC, May 21, 2012.

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## Encouraging Wildlife Habitat Management on Private Woodlands

**Funded by:** NYS Department of Environmental Conservation (NYSDEC)

**Collaborators:** Daniel Rosenblatt, Mark Kandel, Mike Wasilco, Steven Joule, Matthew Swayze, Marcelo DelPuerto, Paul Novak, and Richard Pancoe (NYSDEC)

**Investigators:** Shorna Broussard Allred, Richard Stedman, Daniel Decker, and Rachel Parks

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

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## Improving the Sustainability of Tree Planting in Urban Areas: The Effects of Stewardship and Site Conditions on Street Tree Survival

**Funded by:** The Toward Sustainability Foundation

**Collaborator:** Jeanne Grace (Parks and Forestry Division, Department of Public Works, City of Ithaca)

**Investigators:** Shorna Broussard Allred, Christine Moskell, and Nina Bassuk (Dept. of Horticulture)

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Presentation:**

Moskell, C., Bassuk, N. and Broussard Allred S. 2012. Improving the sustainability of tree plantings in urban areas: The effects of stewardship and site conditions on street tree survival. *Toward Sustainability Foundation Grantees Progress Report Meeting*. Ithaca, New York. October 19, 2012.



A new street tree that was planted by the City of Ithaca in front of someone's residence. The sign attached to a green plastic watering bag was designed to remind residents to water (photo by Christine Moskell).



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**Toward Sustainable Urban Forest Governance: Strategies for Stakeholder Engagement in Tree Planting and Stewardship**

**Funded by:** The Ittleson Foundation and the Garden Club of America

**Collaborators:** Nancy Wells (Dept. of Design and Environmental Analysis) and Scott Peters (Dept. of Horticulture)

**Investigators:** Shorna Broussard Allred and Christine Moskell

**HDRU Contact:** Christine Moskell ([csm94@cornell.edu](mailto:csm94@cornell.edu))

**Publication:**

Moskell C., and S. Broussard Allred. *In Press*. Integrating human and natural systems in community psychology: An ecological model of stewardship behavior. *American Journal of Community Psychology*.

**Presentations:**

Moskell, C. 2012. Exploring community-based interventions for engaging residents in urban forest management. *Garden Club of America, Washington, DC Chapter*. Bethesda, MD. March 26, 2012.

Moskell, C. 2012. Examining strategies to increase public support for urban tree plantings in "million-tree" planting initiatives. *Cornell University Department of Natural Resources Graduate Research Symposium*. Ithaca, New York. January 19-20, 2012.

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**Woody Biofuel Production in New York: Building Capacity through Applied Social Science Research**

**Funded by:** Cornell University Agricultural Experiment Station

**Collaborators:** Brett Chedzoy (Cornell Cooperative Extension (CCE) Schuyler County), Laurel Gailor (CCE Warren County), Guillermo Metz (CCE Tompkins), and Marilyn Wyman (CCE Greene County)

**Investigators:** Shorna Broussard Allred, Peter Smallidge, and Nancy Connelly

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

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**The Development of a Participatory Urban Forestry Community Engagement Model**

**Funded by:** The Ittleson Foundation

**Collaborators:** Caroline Tse (Cornell University Cooperative Extension – NYC, Urban Environment Program); Ruth Rae, Kristy King, Minona Heaviland, Jennifer Greenfield, and Jackie Lu (NYC Department of Parks and Recreation); Morgan Monaco and Ellen Arnstein (Million Trees NYC/NYC Parks); Faisal Al-Juburi (Million Trees NYC/New York Restoration Project); Susan Goberman and Nelson Villarrubia (Trees NY); Erika Svendsen and Lindsey Campbell (US Forest Service); Gerard Lordahl (Council on the Environment of NYC); and Alice Ewan Walker (Alliance for Community Trees)

**Investigators:** Shorna Broussard Allred, Christine Moskell, and Gretchen Ferez (Cornell Cooperative Extension)

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Publication:**

[www.blogs.cornell.edu/peopleandtrees](http://www.blogs.cornell.edu/peopleandtrees) (website forthcoming)

**Presentations:**

Broussard Allred, S., Moskell, C., 2012. Pathways to stewardship: A practical toolkit for community engagement in urban forestry. *Natural Resources Programs and Partnerships At Work: The American Natural Resource Extension Professionals Biennial Conference*. Hendersonville, NC. May 18-23, 2012.

Broussard Allred, S and Moskell, C. 2012. Involving the community in urban forestry: A toolkit of best practices for practitioners. *Growing the Urban Forest: Five Perspectives*. *Central New York ReLeaf Workshop*. Cortland, NY. May 11.

Moskell, C. Broussard Allred, S. 2012. Enhancing Community Engagement in Urban Forestry. *New York Urban and Community Forestry Council, ReLeaf Region 7 Council Meeting*. Dewitt, NY. January 27.

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### **Private Forest Owners of Pennsylvania**

**Funded by:** Pennsylvania Bureau of Forestry

**Collaborators:** A.E. Luloff, James Finley, and Alex Metcalf (Penn State University)

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publication:**

Metcalf, A.L., J.C. Finley, A.E. Luloff, R.C. Stedman, and D.L. Shumway. 2012. Private forest landowners: Estimating population parameters. *Journal of Forestry* 110(7): 362-370.

**Presentation:**

Metcalf, A.L., J.C. Finley, A. E. Luloff, R.C. Stedman, and D. Shumway. 2012. Sampling and estimation of private forest landowner populations. Paper presented at the 18<sup>th</sup> *International Symposium for Society and Natural Resources*, Edmonton, Alberta: June 17-21.

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### **Conservation of Mangrove Forests in Pakistan through Community Awareness and Involvement**

**Investigators:** Shorna Allred and Sarwat Ismail

**HDRU Contact:** Sarwat Ismail ([si73@cornell.edu](mailto:si73@cornell.edu))

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### **Addressing Private Forestland Parcelization in the Hudson River Watershed: An Integrated Research and Extension Approach**

**Funded by:** Cornell University Agricultural Experiment Station, Cornell Cooperative Extension

**Collaborators:** Richard Stedman and Peter Smallidge

**HDRU Contact:** Shorna Broussard Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Publication:**

Roe, A. and S. Broussard Allred. (In Press). Thriving or Surviving? Forester Adaptations to Parcelization in New York State. *Small-Scale Forestry*. DOI 10.1007/s11842-012-9216-0.

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### **Other Publications on Forest Lands Management**

Creamer, S. F., Genz, A., and Blatner, K. A. 2012. The Effect of Fire Risk on the Critical Harvesting Times for Pacific Northwest Douglas-Fir when Carbon Price is Stochastic. *Agricultural and Resource Economics Review*, 41(3): 1-14.

Creamer, S. F., Blatner, K. A., and Butler, B. J. 2012. Certification of Family Forests: What Influences Owners' Awareness and Participation? *Journal of Forest Economics*, 18 (2): 91-174.

## **Natural Resources Communication and Education**

Communication and education (C&E) programs and courses are fundamental to natural resource management. State and federal agencies, universities, state cooperative extension services, and nongovernment organizations conduct a wide variety of programs and courses. C&E programs perform an important role in bringing informed public involvement to decision making and

influencing public perception of and behavior toward natural resources and their management. The traditional focus of C&E efforts has been to raise informational levels of the public. The HDRU fulfills this role both through its teaching and through a variety of Extension and outreach programs. It is also frequently involved in conducting C&E program evaluations.

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### **Sustainable Forest Management for Wildlife**

**Funded by:** CALS Land Grant Graduate Fellowship & State Wildlife Grant (through NY Forest Owner's Association) & Audubon New York

**Collaborators:** Richard Taber, Kristi Sullivan, Gary Goff, Stephen Morreale (Cornell Cooperative Extension), and Jillian Liner (Lab of Ornithology)

**Investigators:** Shorna Allred, Richard Stedman, and Ashley Dayer

**HDRU Contact:** Ashley Dayer ([aad86@cornell.edu](mailto:aad86@cornell.edu))

### **Publication:**

Denvir, A., Dayer, A., Allred, S.B. and R. Taber. 2012. Grasslands. Habitat Stewardship Series brochure. Cornell University Cooperative Extension, NYSDEC, and NY Forest Owners Association.

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### **Other Publication on Natural Resources Communication and Education:**

Nielsen, L.A. and B.A. Knuth. 2012. People for people: Education for the human dimension. Chapter 18 in D.J. Decker, S. Riley, and W.F. Siemer, eds. Human Dimensions of Wildlife. Johns Hopkins University Press. Maryland.

## **Water Resource Management and Policy**

The HDRU collaborates with other university researchers, watershed professionals, managers, and state and federal agencies to conduct research that helps address critical water resource management and policy issues of relevance to land and water managers and policymakers.

Additionally, research is also focused on understanding the behavior of riparian landowners as they are key to protecting water quality. Many watershed systems are increasingly dominated by non-agricultural interests, yet policy initiatives (both incentive programs and regulatory regimes) are still designed primarily around agriculture. This leaves significant gaps in understanding and effectiveness.

**Investigators:** Shorna Allred, Richard Stedman, and Maureen Mullen

**HDRU Contact:** Shorna Allred ([srb237@cornell.edu](mailto:srb237@cornell.edu))



Lake Champlain in the Adirondack Park, Essex County, NY.  
Photo by Lincoln Larson.

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### **Designing an Evaluation Protocol for the Hudson River Estuary Program's Biodiversity Outreach Program**

**Funded by:** New York State Department of Environmental Conservation (NYSDEC), Hudson Estuary Program

**Collaborators:** Laura Heady and Karen Strong (NYSDEC)

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### **Factors Influencing Landowner Riparian Conservation**

**Funded by:** USDA Conservation Enhancement Assessment Program; AFRI

**Collaborators:** James Shortle, Robert Brooks, and Robert Carline (Penn State University); Todd Walter (Dept. of Biology and Environmental Engineering); and Zach Easton (Virginia Tech University)

**Investigator:** Richard Stedman

**HDRU Contact:** Richard Stedman  
([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publications:**

Armstrong, A.L., and R.C. Stedman. 2012. Landowner willingness to implement riparian buffers in an urbanizing watershed. *Landscape and Urban Planning* 105(3):211-220.

Armstrong, A., R.C. Stedman, J. Bishop, and P. Sullivan. 2012. What's a stream without water? Double disproportionality in headwater regions affecting water quality. *Environmental Management* 50:849-860.

Armstrong, A.L., and R.C. Stedman. Rural landowner identity and efficacy in a transitioning agricultural watershed. Manuscript forthcoming at *Society and Natural Resources*.

Osmond, D.L., R. Brooks, S. Yetter, R. Carline, K. Boomer, A. Armstrong, R. Stedman, D.W. Meals, and G.D. Jennings. 2012. Spring Creek Watershed, Pennsylvania: National Institute of Food and Agriculture–Conservation Effects Assessment Project pp. 342-357 in D. L. Osmond, D.W. Meals, D.L.K. Hoag, and M. Arabi (Eds) *How to Build Better Agricultural Conservation Programs to Protect Water Quality: The National Institute of Food and Agriculture–Conservation Effects Assessment Project Experience*. US Soil and Water Conservation Service.

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**Flood Resilience Education in the Hudson River Estuary. Needs Assessment and Program Evaluation**

**Funded by:** NYS Dept. of Environmental Conservation, Hudson River Estuary Program

**Investigators:** Shorna Allred and Gretchen Gary

**HDRU Contact:** Shorna Broussard Allred  
([srb237@cornell.edu](mailto:srb237@cornell.edu))

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**Human Dimensions of Watershed Stewardship**

**Funded by:** NYS Dept. of Environmental Conservation, Hudson River Estuary Program and Federal Formula Funds (Hatch and Smith-Lever)

**Collaborators:** Allison Chatrchyan and Carolyn Klocker (Cornell Cooperative Extension (CCE) Dutchess County); Elizabeth LoGiudice (CCE Green and Columbia Counties); Gretchen Rae and Brent Gotsch (CCE Ulster County)

**Investigators:** Shorna Allred and Maureen Mullen

**HDRU Contact:** Shorna Broussard Allred  
([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Publication:**

Keller, E., Allred, S., Chatrchyan, A. and C. Klocker. 2012. Assessment of Need for a New York State Master Watershed Steward Program. Cornell University Cooperative Extension. 53pp.

**Presentation:**

Allred, S., Klocker, C., LoGiudice, E., and M. Mullen. 2012. Master Watershed Steward Program: Promoting Stewardship, Developing Partnerships, and Evaluating Progress. *Cornell Cooperative Extension Agriculture and Food In-Service*, Ithaca, NY, November 13, 2012.

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**Institutional Dimensions of Ecosystem-based Management among New York Ocean and Great Lakes Ecosystem Conservation Council Agencies**

**Funded by:** Cornell University Agricultural Experiment Station

**Collaborators:** Barbara A. Knuth, Y. Connie Yuan (Dept. of Communication), and Wesley Sine (Johnson Graduate School of Management)

**Investigator:** Carrie N. Simon

**HDRU Contact:** Carrie N. Simon  
([cns44@cornell.edu](mailto:cns44@cornell.edu))

**Presentations:**

Simon, C.N, 2012. Interpretation and Adoption of Ecosystem-Based Management by State Agencies and Organizations in New York State, 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, MN.

Simon, C.N, 2012. Institutional dimensions of Ecosystem-based Management Among New York Ocean and Great Lakes Ecosystem Conservation Council Agencies, oikos Young Scholars Organizations Academy, Social Innovation and Organizational Impact. Filzbach, Switzerland.

## Natural Resources Policy, Planning, and Evaluation

Natural resources planning involves public input, particularly at the beginning of the planning cycle and at the end, through assessment or evaluation, as input to plan revision. The HDRU has undertaken research and outreach in a number of situations involving planning.

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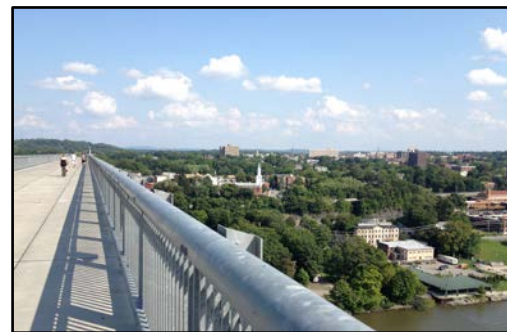
### Building Local Capacity for Environmental Resource Conservation in the Face of Change

**Funded by:** Cornell University Agricultural Experiment Station and Cornell Cooperative Extension

**Collaborators:** Heidi Kretser (Wildlife Conservation Society); Laura Heady and Karen Strong (Cornell Cooperative Extension & NYSDEC)

**Investigators:** Bruce Lauber, Lincoln Larson, and David Kay (Cornell Community and Regional Development Institute)

**HDRU Contact:** Lincoln Larson ([lrl66@cornell.edu](mailto:lrl66@cornell.edu))



Walkway over the Hudson State Historic Park, Poughkeepsie, NY. Photo taken by Lincoln Larson while he was doing research there.

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### Environmental Policy Capacity

#### **Other Presentation on Natural Resources Policy, Planning, and Evaluation**

Hare, D. Delivering the potential of the public trust doctrine. Paper presented at Pathways to Success conference, Breckenridge, CO, September 2012.

## The Well-Being of Resource-Dependent Communities

The well-being of communities that depend on the extraction and processing of forest-based resources is crucially important to definitions of the sustainability and resilience of the resource dependent industries. Defining this relationship is somewhat difficult, based on the myriad indicators

of well-being, and multiple definitions of dependence. The conceptual basis of this overall trajectory has broadened from “forest dependence” to “resource dependence” (reflecting emerging projects in the area of mineral and agricultural-based dependence). Further, wholesale changes in

the structure and governance of the forest industry may pose significant challenges to community sustainability.

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### **Resource Dependence and the Well-Being of Rural Communities**

**Funded by:** Canadian Forest Service

**Collaborators:** William White, Michael Patriquin (Canadian Forest Service, Northern Forestry Centre); John Parkins (University of Alberta), and Tom Beckley (University of New Brunswick)

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publication:**

Stedman, R.C., M. Patriquin, and J. Parkins. 2012. Dependence, diversity, and the well-being of rural community: Building on the Freudenburg legacy. *Journal of Environmental Studies and Sciences*. 2:28-38.

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### **Community Response to Forest Fire Risk in the Northeast United States**

**Funded by:** US Forest Service (USFS)

**Collaborators:** Pam Jakes (USFS), Jason Gordon (Mississippi State University); A. E. Luloff, and James Finley (Penn State University)

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publication:**

Gordon, J.S., A.E. Luloff, and R.C. Stedman. 2012. A multi-site comparison of community wildfire risk perceptions. *Journal of Forestry* 110(2):74-78.

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### **Evaluating the Outcome of Working Forest Easements**

**Funded by:** Northeast States Research Cooperative

**Collaborator:** Tim Tear (The Nature Conservancy)

**Investigator:** Steven Wolf

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publication:**

Neugarten, R., S. Wolf, R.C. Stedman. 2012. Forest fights and forest rights: working forests as a strategy for reducing tensions in New York. *Society and Natural Resources* 25(12): 1205-1220.

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### **Regional Impacts of Energy Development on the Social, Economic, and Ecological Well-being of Rural Communities in the Northeast**

**Funded by:** Atkinson Center for Sustainable Future and Cornell University Agricultural Experiment Station (Hatch)

**Collaborators:** Susan Christopherson (Dept. of City and Regional Planning), Susan Riha (Dept. of Earth and Atmospheric Sciences) Rod Howe (CALs Cooperative Extension); Stephan Goetz (Northeast Center for Rural Development); Warren Allmon and Robert Ross (Cornell University and the Palentological Research Institute); Kathy Brasier, Tim Kelsey, Fern Willits, Ted Alter (The Pennsylvania State University), and Jeffrey Jacquet (South Dakota State University)

**Investigator:** Richard Stedman

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

**Publications:**

Stedman, R.C., J.B. Jacquet, M.R. Filteau, F.K. Willits, K.J. Brasier, and D.K. McLaughlin. 2012. Marcellus Shale Gas Development and New Boomtown Research: Views of New York and Pennsylvania Residents. *Environmental Practice*.

Clarke, C., D.T.N Evensen, J.B. Jacquet, and R.C. Stedman. 2012. Emerging Risk Communication associated with shale gas development. *European Journal of Risk Research*. 3:424-430.

### **Presentations:**

Jacquet, J.B. and R.C. Stedman. 2012. Community impacts and resident attitudes towards combined Wind Farm and Natural Gas Development in Northern Pennsylvania. Paper presented at the 18<sup>th</sup> *International Symposium for Society and Natural Resources*, Edmonton, Alberta: June 17-21.

Evensen, D.T.E., C.E. Clarke, and R.C. Stedman. 2012. A New York (or Pennsylvania) state of mind: Cross-state differences in print media coverage of drilling for natural gas in the Marcellus Shale region. Paper presented at the 18<sup>th</sup> *International Symposium for Society and Natural Resources*, Edmonton, Alberta: June 17-21.

Willits, F.K., K. Brasier, D.K. McLaughlin, R.C. Stedman, and M. Filteau. 2012. Support/opposition for natural gas development among Pennsylvania and New York residents. Paper presented at the 75<sup>th</sup> *Annual Meetings of the Rural Sociological Society*. July 26-29, Chicago, IL

Jacquet, J. and R.C. Stedman. Landowner attitudes towards combined wind farm and natural gas development in northern Pennsylvania. Paper presented at the 75<sup>th</sup> *Annual Meetings of the Rural Sociological Society*. July 26-29, Chicago, IL.



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### **Impacts of Second Home Development in the Northern Forest**

**Funded by:** Northeast States Research Cooperative (NSRC), Texas A&M University

**Collaborators:** Brian Eiesenhauer, (Plymouth State Univ., NH); Jim Finley and A. E. Luloff (Penn State), Todd Gabe (University of Maine), and Walt Kuentzel (University of Vermont)

**HDRU Contact:** Richard Stedman ([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

### **Publication:**

Vergunst, J., C. Geisler and R. Stedman. 2012. Nature Conservation and Environmental Management: Working Landscapes in Adirondack Park, US, and Cairngorms National Park, UK. Pp. 233-252 in Shucksmith, M., D.L. Brown, J. Vergunst, and M.E. Warner (Eds.) *Rural Transformations & Rural Policies in the US and UK*. NY: Routledge.

### **Presentations:**

Stedman, R.C., A.L. Armstrong, and B.W. Eisenhauer. 2012. Community resilience and second home development in the northern forest. Paper presented at the 18<sup>th</sup> *International Symposium for Society and Natural Resources*, Edmonton, Alberta: June 17-21.

Armstrong, A.L., and R.C. Stedman. 2012. Good fences make good neighbors: Inequality and culture clash in second homeowner-rich communities of the U.S. Northern Forest. Paper presented at the 18<sup>th</sup> *International Symposium for Society and Natural Resources*, Edmonton, Alberta: June 17-21.

## **Sense of Place**

Sense of place, or the meanings and attachments that individuals and/or groups hold for a spatial setting, has become an important construct in resource management. Sense of place is based on experience with a setting that is based on a certain level of ecological quality of the setting, as well as

direct provision of experiential opportunities by resource managers. The goal of this research is to understand the ecological and community-based factors associated with the local meanings of landscape, understand how these meanings are tied to local attachment, how this attachment

potentially predicts human behavior, and how these relationships are similar or different across a wide range of socio-ecological settings. A mix of qualitative and quantitative methods have been utilized for discrete studies under this subject.

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### **Improving Contributions of Local Nature-based Recreation to Sustainable Environmental Quality of Rural Communities**

**Funded by:** Cornell University Agricultural Experiment Station and Cornell Cooperative Extension

**Collaborators:** David Kay (Cornell Community and Regional Development Institute), Kristi Sullivan (Cornell Cooperative Extension), Michael Schiavone (NYSDEC), Tom Lyons (NYS Office of Parks, Recreation, and Historical Preservation)

**Investigators:** Bruce Lauber, Daniel Decker, Richard Stedman, Caren Cooper, and Lincoln Larson

**HDRU Contact:** Lincoln Larson  
([lr166@cornell.edu](mailto:lr166@cornell.edu))

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### **Sense of Place and Environmental Education**

**Funded by:** Cornell Center for Sustainable Future

**Investigators:** Alexey Kudryatsev, Marianne Krasny, and Richard Stedman (Cornell University); and Nicole Ardoin (Stanford University)

**HDRU Contact:** Richard Stedman  
([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

#### **Publications:**

Kudryavtsev, A., M.E. Krasny, and R.C. Stedman. 2012. The impact of environmental education on sense of place among urban youth. *Ecosphere* 34(29): 1-15.

Kudryavtsev, A., R.C. Stedman, and M.E. Krasny. 2012. Sense of place in environmental education. *Environmental Education Research*. 18(2):229-250.

## **Climate Change**

Climate change affects both the ecological and social systems as well as how they interact. HDRU research is focused on understanding climate change policy, climate vulnerabilities at the community level, climate attitudes and behavior, and the interactions between ecological and social systems in the context of a changing climate.

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### **Analyzing Climate Change Policy Capacity**

**Funded by:** Social Science and Humanities Research Council (of Canada)

**Investigators:** Richard Stedman and Adam Wellstead (Michigan Technological University); and Debra Davidson (University of Alberta)

**HDRU Contact:** Richard Stedman  
([rsc6@cornell.edu](mailto:rsc6@cornell.edu))

#### **Publication:**

Wellstead, A.M. and R.C. Stedman. 2012. The Role of Climate Change Policy Work in Canada. *Canadian Review of Political Science* 6(1):117-124.

#### **Presentation:**

Davidson, D. and R.C. Stedman. 2012. Operationalizing climate change reflexivity: New insights into social response. *Presented at the Second ISA Forum of Sociology*. Buenos Aires, Argentina, August 1-4.

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### **Assessing Attitudes to Flood Risk and Climate Change Before and After the 2011 Floods in New York State**

**Funded by:** National Oceanic and Atmospheric Administration (NOAA) Sector Applications Research Program (SARP)



**Investigators:** Shorna Allred, Maureen Mullen, and Art DeGaetano (Dept. of Earth and Atmospheric Sciences)

**HDRU Contact:** Shorna Allred  
([srb237@cornell.edu](mailto:srb237@cornell.edu))

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### **Characterization of Attitudes among Hudson River Estuary Watershed Municipal Officials about Climate Change Adaptation**

**Funded by:** New York Water Resources Institute with support from NYS Department of Environmental Conservation (NYSDEC) Hudson River Estuary Program

**Collaborators:** Kristin Marcell and Scott Cuppett (NYSDEC Hudson River Estuary Program)

**Investigators:** Shorna Allred, Maureen Mullen, and Allison Chatrchyan (Cornell Cooperative Extension Dutchess County)

**HDRU Contact:** Shorna Allred  
([srb237@cornell.edu](mailto:srb237@cornell.edu))

**Publication:**

Mullen, M, Allred, S.B. and A. Chatrchyan. 2012. Local Climate Change Challenges and Opportunities: Understanding Municipal Official Perspectives. Cornell University Human Dimensions Research Unit, HDRU Outreach Series No. 12-1, September 2012.

**Presentations:**

Allred, S., Chatrchyan, A., and M. Mullen. 2012. Hudson Valley Municipal Officials Views on Climate Change. *Hudson Valley Climate Change Network*, Staatsburg, NY, August 13, 2012.

Chatrchyan, A., Allred, S., and M. Mullen. 2012. Local Climate Change Challenges and Opportunities: Understanding NYS Municipal Official Perspectives. *Fourth International Conference on Climate Change: Impacts and Responses*, Seattle, WA, July 12-13, 2012.

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### **Empowering Land Managers to Increase Resilience of New York's Natural Resources in the Face of Regional Climate Change**

**Funded by:** Cornell University Cooperative Extension (Smith-Lever)

**Collaborators:** Rebecca Schneider, Kristi Sullivan, Peter Smallidge, Gary Goff, Paul Curtis, Maureen Mullen (Cornell Cooperative Extension); David Wolfe and Jonathan Comstock (Dept. of Horticulture); and Allison Chatrchyan (Cooperative Extension- Dutchess County)

**Investigators:** Shorna Broussard Allred, Rebecca Schneider, and Allison Chatrchyan

**HDRU Contact:** Shorna Broussard Allred  
([srb237@cornell.edu](mailto:srb237@cornell.edu))

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### **Rural New York State Residents' Perceptions of Climate Change**

**Funded by:** National Science Foundation

**Investigators:** Richard Stedman, Shorna Allred, Robert Ross (Dept. of Earth and Atmospheric Sciences)

**HDRU Contact:** Richard Stedman  
([rcs6@cornell.edu](mailto:rcs6@cornell.edu))

**Publication:**

Stedman, R.C., R.M. Ross., S.B. Allred, and S.J. Chicone. 2012. Upstate rural New York residents' perceptions of climate change. *Research & Policy Brief Series, Community and Rural Development Institute*. 50.



Graduate Student Ted Lawrence discussing ecosystem services in a Maya forest-agricultural area.

## Understanding and Managing Social-ecological Systems

Managers and researchers increasingly must grapple with the problem of understanding and managing large, complex, social-ecological systems. Such 'coupled systems' are populated with social and ecological problems, and new types of uncertainty that emerge at the intersection of society and ecology.

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### Great Lakes Fishery Commission Human Dimensions Research Theme Development

**Funded by:** Great Lakes Fishery Commission

**Collaborator:** Marc Gaden (Great Lakes Fishery Commission, University of Michigan)

**Investigators:** Richard Stedman and Nadine Heck

**HDRU Contact:** Nadine Heck ([tnh28@cornell.edu](mailto:tnh28@cornell.edu))

**Presentation:**

Stedman, R.C. (2012) Great Lakes Fishery Commission Human Dimensions Research Theme Development. Great Lakes Fishery Commission Board of Technical Experts Meeting, Grand Rapids, Michigan, September.

## Summary of Extension and Outreach Activities

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### Fish and Wildlife Agency Transformation Workshops

HDRU Director Dan Decker, Dr. Cynthia Jacobson (former HDRU doctoral student, currently USFWS Assistant Regional Director for Reg 7--Alaska), Chris Smith (Field representative for Wildlife Management Institute), Ann Forstchen (Florida Fish and Wildlife Conservation Commission) and Dr. John Organ (Chief for Federal Aid USFWS Reg 5—Northeast) organized and presented in a day-long workshop on transformative change needs of state fish and wildlife agencies during the 2012 North American Wildlife and Natural Resources Conference in Atlanta, GA. This workshop was assisted by the Organization of Wildlife Planners (OWP). The workshop was attended by approximately 50 agency and NGO leaders. A regular conference session in the Agency Transformation series is planned for 2013, which the same set of organizers are planning around the topic of the public trust doctrine.

**Related Publications:**

Lauber, T.B. and D.J. Decker. 2012. Integrating Human Dimensions into Fish and Wildlife Management: An Essential Component of Adaptive Capacity. *Human Dimensions of Wildlife*, 17(5): 317-319.

Organ, J. F., D. J. Decker, S. J. Riley, J. E. McDonald, Jr., and S. P. Mahoney. 2012. Adaptive management in wildlife conservation. Pages 43-54 (chapter 25) in N. Silvy, editor. *The wildlife techniques manual*. Seventh edition. The Johns Hopkins University Press, Baltimore, MD.

**Related Presentations:**

North American Wildlife and Natural Resources Conference, Agency Transformation Workshop. March 2012 in Atlanta, GA. (Daniel Decker, co-chair)

Public Trust Doctrine Workshop for the Florida Fish and Wildlife Conservation Commission. February 2012 in Tallahassee, FL. (Daniel Decker, co-chair and workshop facilitator)

Forstchen, A., and D. Decker. 2012. How Human Dimensions Enables Agency Transformation: A Case Study in Florida. "Pathways to success: Integrating human dimensions into fish and wildlife management" Conference. Estes Park, CO. (September 2012).

Decker, D. and A. Forstchen. 2012. Using a strategic choice matrix to communicate the role for human dimensions in agency transformation. "Pathways to success: Integrating human dimensions into fish and wildlife management" Conference. Estes Park, CO. (September 2012).

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### **Outreach on Legacy Planning for Landowners**

Shorna Allred and Maureen Mullen have instituted an extension program designed to reduce the risk associated with the intergenerational transfer of family forestlands. Multiple legacy planning workshops and educational activities for New York woodland owners, their families, and those that work with woodland owners, were held in 2012. The workshops focused on motivating families to begin communicating about the future of the family's land, including discussions about the land's sentimental and financial value, defining goals and challenges for the land and family, how to plan a family meeting, and how to groom successors. The workshops also focus on estate planning and the legal and financial tools needed to transfer the land to successors, heirs, or other caretakers of the land. We have developed a social networking and legacy planning website for woodland landowners and other stakeholders (see <http://SuccessionPlanning.Ning.com>)

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### **Outreach in Watershed Management**

With the collaborators listed below, Shorna Allred received funding (Smith-Lever) to develop a "New York Master Watershed Steward" program to strengthen the local capacity for successful watershed management across New York State and address non-point source pollution. This program extends the capacity of many watershed organizations and Extension staff by providing a

trained and knowledgeable cadre of watershed volunteers and a regional network for delivering extension educational programming. This program can increase the impact and scope of research-based information dissemination by creating informed leaders and will help increase community ability to solve their own problems and communicate with local government about water priorities. Implementation of the Master Watershed Steward Program began in June 2012 with County Coordinators in Cornell Cooperative Extension offices in Ulster (Gretchen Rae, Brent Gotsch), Dutchess (Carolyn Klocker), and Columbia/Greene Counties (Elizabeth LoGiudice). The pilot program began with 27 volunteer stewards ranging from individuals in local government, to those already involved with local watershed organizations, to interested community members. The advisory committee includes Allison Chatrchyan (CCE Dutchess County), Deb Grantham (Cornell University), Scott Cuppett (Hudson River Estuary Program/Water Resources Institute), Elizabeth Higgins (CCE Ulster County), Emilie Hauser (Hudson River Estuarine Research Reserve), Mark Vian (NY Dept. of Environmental Protection), Emily Vail (Hudson River Estuary Program), Barbara Kendall (Hudson River Watershed Alliance), and Terri Mayhew (CCE Greene/Columbia County).



New York Master Watershed Stewards and program coordinators (June 2012).

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### **Professional Training and Outreach**

Shorna Allred, Christine Moskell, Gretchen Ferenz (Cornell Cooperative Extension NYC), Lorraine Brooks (Cornell Cooperative Extension NYC), and Caroline Tse (Cornell Cooperative Extension NYC) are working together to develop an “Urban Forestry Community Engagement” Toolkit. The toolkit will enable agencies and organizations to effectively involve local residents and sustain their participation in urban and community forestry. In 2011, we conducted a program evaluation of the training series titled “Exploring Trees and the Urban Forest in Your Neighborhood.” The training series was comprised of 3 workshops: “Explore Your Urban Forest”, “Getting to Know Your Urban Forest” and “Diversity Matters in the Urban Forest.” A program evaluation of the training series was completed. Christine Moskell and Shorna Allred gave a presentation to Cornell Cooperative Extension educators on strategies for community engagement in urban forestry and the project’s toolkit resources as part of Cornell University Cooperative Extension Centennial Conference in Syracuse, NY in October. Additionally, Shorna Allred gave a presentation to 25 municipal employees about the social and environmental benefits of urban trees at a workshop in Westchester County in October 2011.

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### **Thinking Like a Manager**

**Funded by:** Florida Fish and Wildlife Conservation Commission (FWC)

**Collaborators:** Ann Forstchen (and other staff of FWC), William Siemer, and Meghan Baumer

**Investigator:** Daniel Decker

**HDRU Contact:** Daniel Decker ([djd6@cornell.edu](mailto:djd6@cornell.edu))

**Publication:**

Decker, D. J., S. J. Riley, J. F. Organ, W. F. Siemer, and L. H. Carpenter. 2012. Applying impact management: a practitioner’s guide (second edition). Human Dimensions Research Unit and Cornell Cooperative Extension, Cornell University, Ithaca, NY. 119pp.

**Presentations:**

“Thinking Like a Manager” Coaches Training for Florida Fish and Wildlife Conservation

Commission:

- January 9-12, 2012-- Camp Weed, Live Oak, FL
- November 5-8, 2012--Camp Weed, Live Oak, FL

Human Dimensions Seminars for Florida Fish and Wildlife Conservation Commission:

- March 16 in Tallahassee, FL
- March 20 in Panama City, FL
- March 22 in Lake City, FL
- April 10 in West Palm Beach, FL
- April 12 in Lakeland, FL
- April 13 in Ocala, FL

# Summary of Consultations, Honors, Awards, and other Scholarly Activities

HDRU faculty and staff are active in a wide variety of professional and leadership activities. Examples of activities for 2012 are summarized below.

## Associate Editors

William Siemer served as an Associate Editor for the journal *Ursus*.

Shorna Allred served as an Associate Editor for *Society and Natural Resources*.

## Journal Editor

Bruce Lauber and Dan Decker co-edited a special issue of *Human Dimensions of Wildlife* titled "Developing Adaptability: The Promise and Pitfalls of Collaborative Conservation."

## Atkinson Center for a Sustainable Future

HDRU Associate Director Barbara Knuth serves on the Faculty Advisory Committee for the Cornell Atkinson Center for a Sustainable Future, and is a Faculty Fellow, as are Richard Stedman, Shorna Allred, and Dan Decker.

## Awards

HDRU Director Dan Decker was honored with the Wildlife Society's Aldo Leopold Award and Medal. This is the Wildlife Society's highest honor and recognizes individuals who have demonstrated "distinguished services of undoubted significance to the cause of wildlife conservation." The photo below is from the award ceremony in Portland, OR.



Dan Decker was inducted in the Port Jervis Alumni Hall of fame for his numerous distinguished achievements in wildlife management and positive impacts on the community.

HDRU graduate student Darrick Evensen received the Cornelia Ye Outstanding TA Award. This award is given to two graduate students through the Center for Teaching Excellence at Cornell University for excellence in undergraduate teaching.

HDRU PhD Candidate Ashley Dayer was awarded an Athena Fund research grant and a graduate assistantship from the Cornell Lab of Ornithology for her collaborations with the Conservation Science program.

## Communications Consultant

HDRU PhD Candidate Ashley Dayer served as a strategic communications consultant to the Intermountain West Joint Venture ([www.iwlv.org](http://www.iwlv.org)), Appalachian Mountain Joint Venture ([www.amjv.org](http://www.amjv.org)), and Prairie Potholes Joint Venture ([www.ppvj.org](http://www.ppvj.org)) Migratory Bird Joint Ventures are public-private partnerships focused on bird and habitat conservation throughout North America.

## Conference Chairs

Dan Decker was a co-chair of the 3<sup>rd</sup> International Pathways to Success: Integrating Human Dimensions into Fisheries and Wildlife Management Conference. Breckenridge, Colorado, September 2012.

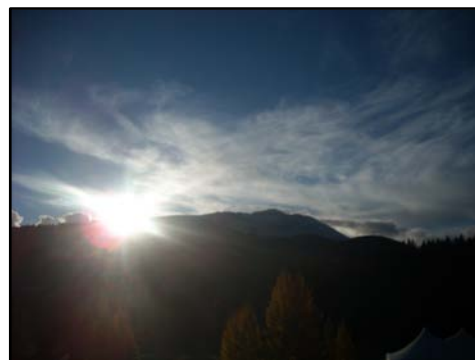


Photo of Breckenridge during the Pathways to Success Conference taken by Darragh Hare.

HDRU PhD Candidate Ashley co-chaired the second Bird Conservation Conference in the Northeast (Plymouth, Massachusetts, October 2012). She also presented the opening plenary presentation on Bridging the Gap in Conservation Implementation.

### **Fellowships**

HDRU graduate students Christine Moskell and Darrick Evensen were the only students from Cornell last year to be recognized as EPA STAR Fellows. They received funding in the social science category for 2012-2015. Approximately 1,500 graduate students applied to this competitive fellowship and only 87 received it.

HDRU graduate student Darrick Evensen was a Buttrick-Crippen Fellowship finalist from the Knight Writing Institute at Cornell University. He received funding for one semester to design and teach a writing seminar on his dissertation research.

Emily Pomeranz who joined the HDRU in fall 2012 as a doctoral student, was awarded a Cornell University fellowship.

Ingrid Biedron, HDRU Ph.D. Candidate, is a recipient of the J.P.Morgan Chase Dolores Zohrab Liebmann Fellowship (2009-2012).

HDRU PhD Candidate Ashley Dayer completed her final year as one of four in the first cohort of CALS Land Grant Graduate Fellows in spring 2012. Her extension activities supported private landowners interested forest management for wildlife habitat, particularly early successional forest habitat. Her extension fellowship advisor was Dr. Shorna Broussard Allred.

### **Integrating Human Dimensions in Wildlife Management**

HDRU Director Dan Decker and Research Associate William Siemer completed their work as editors (with Dr. Shawn Riley, former HDRU post-doc and current associate professor at Michigan State University) revising the human dimensions textbook:

Decker, D.J., Riley, S.J., and Siemer, W.F. (eds.) 2012. *Human Dimensions of Wildlife Management* (2nd ed.). Baltimore, MD: Johns Hopkins University Press. 286 pp.

Several current and former HDRU faculty, staff and graduate students wrote chapters and text boxes to this effort. Margie Peech and Meghan Baumer also contributed to this effort.

#### ***Textbook chapters from HDRU authors:***

Decker, D.J., S.J. Riley, and W.F. Siemer. Chapter 1: *Human Dimensions of Wildlife Management.*

Leong, K.M., D.J. Decker, and T. B. Lauber. Chapter 3: *Stakeholders as Beneficiaries of Wildlife Management.*

Stedman, R.C. Chapter 5: *Sociological Considerations in Wildlife Management.*

Riley, S.J., D.J. Decker, and W.F. Siemer. Chapter 7: *Wildlife Management as a Process within a System.*

Decker, D.J. Chapter 9: *Planning a Human Dimensions Inquiry.*

Connelly, N.A., W.F. Siemer, D.J. Decker, and S.B. Allred. Chapter 10: *Methods of Human Dimensions Inquiry.*

Lauber, T.B., D.J. Decker, K. Leong, L. Chase, and T. Schusler. Chapter 11: *Stakeholder Engagement in Wildlife Management.*

Shanahan, J., M. Gore, and D.J. Decker. Chapter 12: *Communication for Effective Wildlife Management.*

Enck, J., and A. Bath. Chapter 14: *Human Dimensions of Scarce Wildlife Management.*

Messmer, T., and J. Enck. Chapter 15: *Human Dimensions of Wildlife Use Management.*

Nielsen, L.A., and B.A. Knuth. Chapter 17: *Continuing Your Education in Human Dimensions.*

Decker, D.J., S.J. Riley, and W.F. Siemer. Chapter 18: Adaptive Value of Human Dimensions for Wildlife Management.

### **Leadership in Professional Societies**

Shorna Allred serves as an Associate Editor for *Society and Natural Resources*, serves as the Chair of the New York Society of American Foresters Policy Committee, and is Chair of the Society of American Foresters Private Forestry Working Group.

Daniel Decker is a Fellow of The Wildlife Society.

### **National Academies Service and Impact**

HDRU Associate Director Barbara Knuth serves on the Ocean Studies Board (OSB) of the National Academies. In that capacity, she brings a social science perspective to the deliberations of that body. She also holds a 3-year appointment on the National Research Council Committee on the Effects of the Deepwater Horizon Mississippi Canyon-252 Oil Spill on Ecosystem Services in the Gulf of Mexico.

### **Service on Boards**

HDRU Associate Director Barbara Knuth serves as an elected member of the Board of Directors of the Council of Graduate Schools.

HDRU Graduate Student Darrick Evensen served as the Town of Lansing representative on the Tompkins County Environmental Management Council.

HDRU Director Dan Decker continued service on the Board of Governors for the New York Sea Grant Institute (currently the Executive Committee and Vice Chair 2012-2014). He and HDRU Associate Director Rich Stedman served on the Great Lakes Fishery Commission Board of Technical Experts, where Dan also serves on the core group for GLFC research funding recommendations.

Dan Decker serves as the college-designated faculty advisor for the NY State Fish and Wildlife Management Board.

Shorna Allred was re-appointed to the American Forest Foundation's Board of Trustees for another 3-year term beginning in 2012 and currently serves as Secretary of the Board.

### **Service on Committees**

HDRU Associate Director Barbara Knuth serves as the American Fisheries Society (AFS) liaison to the Japanese Society of Fisheries Science. Photo below of Barbara Knuth at the AFS annual meeting in August 2012.



HDRU Director Dan Decker served on the Cornell Graduate Field of Natural Resources Policy and Admissions Committee.

HDRU PhD Candidate and Research Assistant Ingrid Biedron continued a third year of service as a committee member of the American Fisheries Society Resource Policy Committee.

HDRU PhD Candidate Ashley Dayer served on the Planning Committee for the Ecological Society of America Emerging Issues Conference (February 2012): Developing Ecologically-Based Conservation Targets Under Global Change.

Shorna Allred serves on the "Young Forest Management Communications Strategy for the Northeast" Subcommittee of the Northeast Habitat Technical Committee. This subcommittee is developing a communications strategy for encouraging behavior change with key stakeholders regarding early successional habitat conservation.

## Teaching in Natural Resources

Bruce Lauber continued to teach Natural Resource Planning and Management (NTRES 3300), a core course in the Department of Natural Resources curriculum required of all Natural Resource Majors. The course focuses on the principles of planning as applied to natural resource issues.

HDRU Associate Professor Richard Stedman taught Society and Natural Resources (NTRES 2201) an undergraduate survey course intended to expose students to the scope of social science theories and methods used to understand the human/social underpinnings of environmental issues. He also taught Human Dimensions of Coupled Social Ecological Systems (NTRES 4940) in the Spring, a senior seminar/'capstone' course intended to ask upper level students to apply social science concepts and methods to the analysis of case studies that demonstrate crucial feedback loops between environmental change and social-economic change. In the Fall of 2012 he co-taught Community, Place, and Environment (NTRES 6201/DSOC 6200) with Development Sociology

Professor David Brown. This is a graduate seminar on theory of place and community from a sociological perspective, application of the workings of place/community to environmental issues and governance.

HDRU Associate Professor Shorna Allred taught NTRES 6000, Introduction to Graduate Study in Natural Resources, in 2012. This class is designed to prepare incoming students for their graduate program in the Field of Natural Resources and to gain the appropriate skills needed to meet the challenges and evolving needs of professionals charged with understanding, researching, and managing sustainable natural and human systems.

## University of Guelph

HDRU Associate Director Barbara Knuth serves as a member of the Special Graduate Faculty, Department of Family Relations and Applied Nutrition, at the University of Guelph, contributing to oversight and advising for a graduate student focused on ethnic minority understanding of and response to fish consumption health advisories.



From left to right: Laura Heady (Biodiversity Outreach Coordinator, Hudson River Estuary Project, CCE-Duchess County), Shorna Broussard Allred, Christine Moskell, Maureen Mullen and Gary Goff at the American Natural Resource Extension Professionals Conference held this past May in Hendersonville, NC. Shorna and Christine presented on their urban forestry toolkit as part of the "Developing a Participatory Urban Forestry Community Engagement Model" project and Shorna, Maureen and Gary presented on the "Communicating Effectively for Enhanced Woodlands Sustainability" project.