

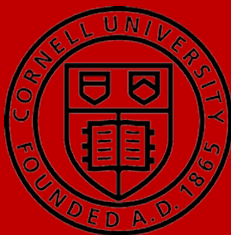
Annual Report 2017

Human Dimensions Research Unit



The Cornell Human Dimensions Research Unit (HDRU) will become the Cornell Center for Conservation Social Sciences (CCSS) in the summer of 2018

2017



**Human Dimensions Research Unit
Department of Natural Resources
Cornell University, Fernow Hall
Ithaca, NY 14853
<http://hdru.dnr.cornell.edu>**

Cornell Human Dimensions Research Unit (HDRU)
is becoming
Cornell Center for Conservation Social Sciences (CCSS)

The Human Dimensions Research Unit at Cornell University will become the Cornell Center for Conservation Social Sciences (CCSS) effective summer 2018. The HDRU has a long and productive track record of externally funded research and publications, teaching undergraduate and graduate students, and outreach and consultation to effect positive change in conservation and environmental management practices. Designation as the CCSS acknowledges that the group's long-term comprehensive focus on the human dimensions of natural resource management has effectively expanded since its inception in the 1970s to include a broader array of problems and methods.

The "Cornell Center for Conservation Social Sciences" reflects the depth and breadth of this group's scholarship encompassing social science-based empirical work on the interactions of social and ecological systems. This work is designed to inform decision making, risk management, response to environmental change, policy making, planning, management, governance, and the advancement of theory. The name conveys an applied, problem-solving orientation consistent with the mission of the Department of Natural Resources and College of Agriculture and Life Sciences, the academic units within which the CCSS is located at Cornell, as well as the breadth and depth of the methodologies used across the social sciences.

CCSS faculty, staff, and students employ a wide range of social science approaches, including applied and foundational work in environmental psychology, sociology, communication, education, policy, and economics. Inquiry exploring how social and ecological elements interact as a system shares the spotlight with these disciplinary approaches. The methodological approaches and geographic scope—from local to global—of this work has similarly broadened.

A consultative process with stakeholders is occurring in Winter/Spring 2018 to inform design of our new website and a communication plan to announce the new designation to key stakeholders, professional and scientific organizations, and the public.

Annual Report 2017

Human Dimensions Research Unit

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

Purpose

This 2017 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 are on the HDRU website: <https://hdru.dnr.cornell.edu> or may be requested by emailing hdru@cornell.edu



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 and environmental management and policy. We do this by studying the interactions of social and ecological systems 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 peer-reviewed 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 environmental policies and management approaches.

HDRU faculty and staff also 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 various aspects of the environment including sociology, policy, and planning.

While all HDRU faculty and academic staff engage in outreach, three of our faculty have Extension appointments from which we serve citizens of New York State and beyond. In 2009, an HDRU Outreach publication series was developed to facilitate sharing of research findings in non-technical form.

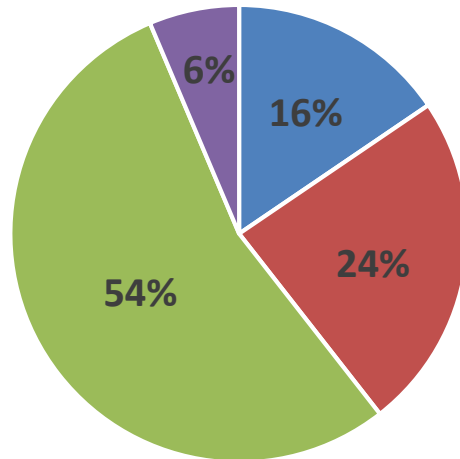
Description

The core HDRU and cooperators are comprised 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 2017, grants and contracts for the 5 primary HDRU faculty totaled nearly \$5 million.

HDRU graduate faculty have membership in the graduate fields of Natural Resources, Development Sociology, Public Affairs, Global Development, and Water Resources. In 2017, graduate faculty committee members for HDRU graduate students came from a variety of departments: Earth and Atmospheric Sciences, Communication, Design and Environmental Analysis, Development Sociology, City and Regional Planning, Applied Economics and Management, Natural Resources and others.

The HDRU has earned an international reputation in the conservation social sciences. The oldest 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 40 years with the NYS Department of Environmental Conservation's Division of Fish, Wildlife, and Marine Resources and a number of federal and state partners.

% OF OVERALL HDRU FUNDING



■ Federal Capacity Funds ■ Fed ■ State ■ Private

Figure 1: HDRU total funding from sponsored projects that were active in 2017 (grants and contracts totaled \$4,718,553).

The funding for HDRU research comes from multiple sources including competitive grants and contracts. In 2017, the following funders contributed to our work:

Albany Pine Bush Preserve Commission, Cornell Cooperative Extension, Cornell University Agricultural Experiment Station, Deutsche Post DHL Group, Engaged Cornell, Great Lakes Fishery Commission, Minnesota Department of Health, National Park Service, New York Department of Environmental Conservation (NYSDEC), Ruffed Grouse Society, U.S. Department of Interior, U.S. Environmental Protection Agency – Great Lakes Restoration Initiative, U.S. Fish and Wildlife Service – Human Dimensions Branch, U.S. Geological Survey, USDA Agricultural Research Service, USDA Agriculture and Food Restoration Initiative, USDA National Institute of Food and Agriculture



Figure 2: 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.

HDRU at a Glance

In 2017 HDRU had:

28 Peer-reviewed Publications

11 HDRU Publication Series Reports

5 Core Faculty

6 Associated Faculty

5 Staff

2 Postdoctoral Researchers

9 Graduate Students

12 Undergraduate Researchers and Interns

7 Course Offerings

12 Workshops and Trainings

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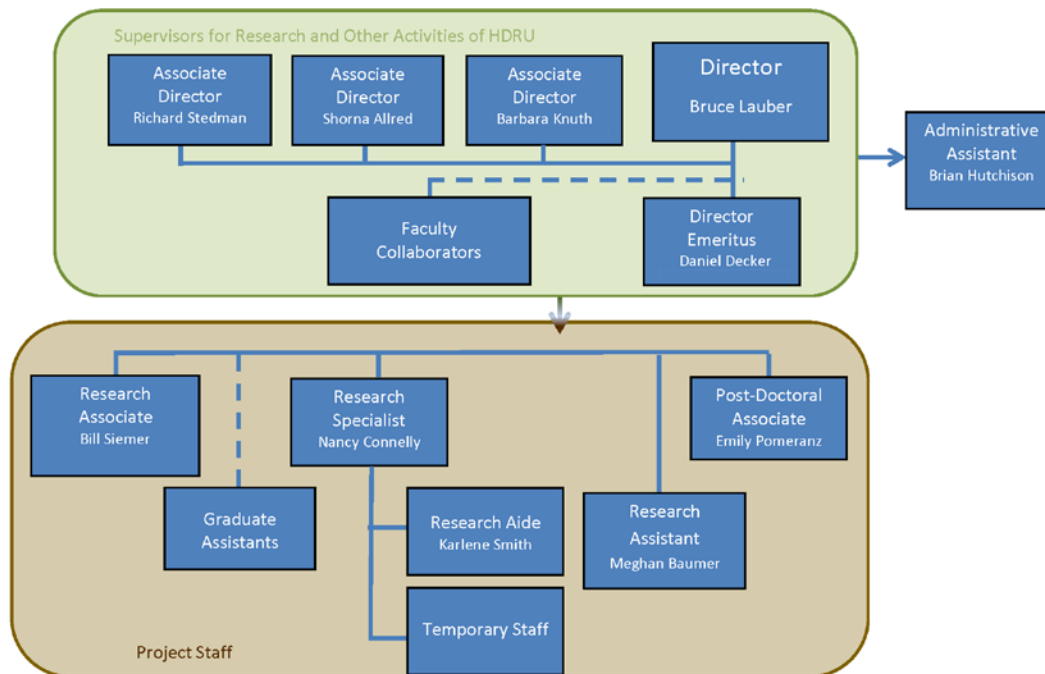


Figure 3: Human Dimensions Research Unit Organizational Chart

Faculty and Staff

Core Faculty (as of January 2018)

T. Bruce Lauber, Senior Research Associate and Unit Director

Specializations: Conflict and collaboration in natural resource management; stakeholder engagement in decision making; risk management and communication related to fisheries management; invasive species management; Great Lakes.

Shorna B. Allred, Associate Professor, House Professor and Dean (Alice Cook House), and Unit Associate Director

Specializations: Human dimensions of natural resource management; natural resource policy; community-based methods, community resilience, and environmental attitudes and behavior with emphasis on forest and water resources.

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

Specializations: Great Lakes and marine fisheries resource policy and management; risk communication and risk management related to chemical contaminants in fish; human dimensions of ecosystem-based approaches to fisheries management.

Richard C. Stedman, 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.

Daniel J. Decker, Professor and Unit Director Emeritus

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

Associated Faculty

Allison Chatrchyan, Sr. Research Associate, Departments of Development Sociology, Earth and Atmospheric Sciences

Specializations: Integration of social science research into environmental, agricultural and food systems work; climate change and water resource policies and institutions; assessment of stakeholder attitudes and behaviors; frameworks and tools for climate change adaption and mitigation practices and sustainable agriculture; community decision-making and resiliency; international environmental politics and policy.

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

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

Heidi Kretser, Adjunct Assistant Professor, Livelihoods and 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.

Katherine A. McComas, Professor and Chair, Department of Communication

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

Jeff Niederdeppe, Associate Professor, Department of Communication

Specializations: Health and environmental communication; public communication campaigns; public opinion and social policy.

Amanda D. Rodewald, Professor, Department of Natural Resources and Director of Conservation Science, Cornell Lab of Ornithology

Specializations: Wildlife population and community ecology; conservation biology; landscape ecology; socioecological interactions in tropical working landscapes; forest management; urban ecology.

Unit Staff

Meghan S. Baumer, Research Assistant

Specializations: Environmental psychology; environmental education; volunteer management; human dimensions training program assistance.

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.

Brian Hutchison, Administrative Assistant

Specializations: Unit office management; website maintenance; administrative assistance.

William F. Siemer, Research Associate

Specializations: Motivations and satisfactions associated with wildlife-dependent recreation; program evaluation; risk perceptions associated with human-wildlife conflicts; mass media effects on wildlife-related perceptions.

Karlene K. Smith, Research Aide

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

Postdoctoral Researchers

Emily Pomeranz

Specializations: Stakeholder engagement and collaboration in tourism and wildlife management.

Graduate Students

(as of January 2018)

Dylan Bugden, Cornell Fellow

Specializations: Energy development and public policy; sense of place; social movements; partisanship and polarization.

Catherine Doyle-Capitman

Specializations: Examining the processes of developing and implementing landscape-level conservation across complex social-ecological systems, with an emphasis on understanding the role of local stakeholders and social science in conservation decision making.

James Goetz

Specializations: Political ecology of natural resource and protected area management. Social and environmental outcomes of payments for ecosystem services. Participative, adaptive conservation planning and management.

Darragh Hare

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

Ted Lawrence

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.

Sarah Naiman

Specializations: The application of sense of place and theory to predict pro-environmental behaviors; social psychology.

Chris Rondem

Specializations: Routines, negotiations, and strategy of renewable energy organizations.

Santi Sapayana

Specializations: The effect of social marketing campaigns on reducing poaching behavior.

Carrie Simon

Specializations: Institutional dimensions of ecosystem-based management; communication theory.

Graduate Students Receiving Degrees in 2017

Abigail Hart

M.S., Natural Resources. (R. Stedman, advisor). Integrated Landscape Management in Forest Dependent Landscapes: Learning from the Model Forest Network to Strengthen the Theory and Practice of Integrated Landscape Management.

Johan Enquist

PhD (Stockholm University), (R. Stedman, co-advisor). Stewardship in an Urban World: Civic Engagement and Human-Nature Relations in the Anthropocene

Jennifer Fownes

M.S., Natural Resources. (S. Allred, advisor). The Influence of Weather on Perceptions of Personal Experience with Climate Change and Extreme Weather in New York State

Sarah Naiman

M.S., Natural Resources. (S. Allred, advisor). Where did the Trees Go? An Exploration of People's Affective Response, Attachment, and Intention to Perform Place-Protective Behaviors for an Actively Managed Urban Nature Preserve.

Nirav Patel

PhD, Natural Resources. (R. Stedman, advisor). Motivating Teacher and Student Engagement with the Environment through Renewable Energy Education.

Emily Pomeranz

PhD. Natural Resources (D. Decker, advisor). Multilevel Public Decision-Making Processes: Implications for Wildlife Resource Governance.

2017 HDRU Peer-reviewed Journal Articles

- Bennett, N. J., Roth, R., Klain, S., Chan, K., Christie, P., Clark, D., Cullman, G., Curran, D., Durbin, T., Epstein, G., Greenberg, A., Neslon, P., Sandlos, J., Stedman, R. C., Teel, T., Thomas, R., Verissimo, D., & Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93-108.
- Bennett, N., Roth, R., Klain, S., Chan, K., Clark, D., Cullman, G., Epstein, G., Nelson, P., Stedman, R. C., Teel, T., Thomas, R., Wyborn, C., Currans., D., Greenberg, A., Sandlos, J., & Verissimo, D. (2017). Mainstreaming the social sciences in conservation. *Conservation Biology*, 31(1), 56-66.
- Bugden, D., Evensen, D., & Stedman, R. C. (2017). A drill by any other name: Social representations, framing, and legacies of natural resource extraction in the fracking industry. *Energy Research and Social Science*, 29, 62-71.
- Chatrchyan, A. M., Erlebacher, R. C., Chaopricha, N. T., Chan, J., Tobin, D. & Allred, S. B. (2017). United States agricultural stakeholder views and decisions on climate change. *WIREs Climate Change*, doi: 10.1002/wcc.469
- Connelly, N. A., Lauber, T. B., Niederdeppe, J., & Knuth, B. A. (2017). Are women anglers of childbearing age following fish consumption advice in the Great Lakes region, U.S. *Journal of Great Lakes Research*, 43, 187-191.
- Decker, D. J., Organ, J.F., Forstchen, A. B., Jacobson, C. A., Siemer, W. F., Smith, C. A., Lederle, P. E. & Schiavone, M. V. (2017). Wildlife governance in the 21st century - Will sustainable-use endure? *Wildlife Society Bulletin*, 41(4), 821-826.
- DuBois, B., Allred, S., Sanderson, E., Giampieri, M. & Bunting-Howarth, K. (2017). Introducing Visionmaker.NYC: An online landscape ecology tool to support social-ecological system visioning and planning. *Journal of Extension*. Retrieved from <https://joe.org/joe/2017december/tt8.php>
- Evensen, D., & Stedman, R. C. (2017). Beliefs about impacts matter little for attitudes about "fracking". *Energy Policy*, 109, 10-21.
- Evensen, D., & Stedman, R. C. (2017). Fracking as promoter and destroyer of 'the good life'. *Journal of Rural Studies*, 11, 1.
- Evensen, D., Stedman, R. C., & Brown-Steiner, B. (2017). Resilient but not sustainable? Public perceptions of shale gas development via hydraulic fracturing. *Ecology and Society*, 22(1).
- Evensen, D., Stedman, R., O'Hara, S., Humphrey, M., & Andersson-Hudson, J. (2017). Variation in beliefs about 'fracking' between the UK and US. *Energy Research and Social Science*, 12, 1-10.
- Giampieri, M., DuBois, B., Allred, S., Bunting-Howarth, K., Fisher, K., Moy, J. & Sanderson, E. (2017). Visions of resilience: Lessons from applying a digital democracy tool in New York's Jamaica Bay watershed. *Urban Ecosystems*, doi: <https://doi.org/10.1007/s11252-017-0701-2>
- Hare, D., Smith, C. A., Forstchen, A. B., & Decker, D. J. (2017). Developing governance principles for public natural resources. *Society and Natural Resources*, 31(3), 382-388.
- Ingalls, M. L., & Stedman, R. C. (2017). Identity processes in social-ecological systems a dialectical approach. *Human Ecology Review*, 23(1), 45-64.

- Larson, L. R., Lauber, T. B., & Kay, D. L. (2017). Local government capacity to respond to environmental change: Insights from towns in New York State. *Environmental Management*, 60, 118-135.
- Lauber, T. B., Connelly, N. A., Niederdeppe, J., & Knuth, B. A. (2017). Urban anglers' adherence to fish consumption advisories in the Great Lakes region. *Journal of Great Lakes Research*, 43, 180-186.
- Lauber, T. B., Connelly, N. A., Niederdeppe, J., & Knuth, B. A. (2017). Urban anglers in the Great Lakes region: Fish consumption patterns, influences, and responses to advisory messages. *Science of the Total Environment*, 590-591, 495-501.
- Markowski-Lindsay, M., Catanzaro, P., Bell, K., Kittredge, D., Leahy, J., Butler, B., Markowitz, E., Milman, A., Zimmerer, R., Allred, S. & Sisock, M. (2017). Estate planning as a forest stewardship tool. *Forest Policy and Economics*, 83, 36-44.
- Masterson, V., Stedman, R. C., Enqvist, J., Tengo, M., Giusti, M., Wahl, D., & Svedin, U. (2017). The contribution of sense of place to social-ecological systems research: A review and research agenda. *Ecology and Society*, 22(1), 49.
- McCance, E. C., Decker, D. J., Colturi, A. M., Baydack, R. K., Siemer, W. F., Curtis, P. D., & Eason, T. (2017). Importance of Urban Wildlife Management in the United States and Canada. *The Mammal Society of Japan*, 42,1-16.
- Parkins, J., Beckley, T., Comeau, L., Stedman, R., Rollins, C. & Kessler, A. (2017). Can distrust enhance public engagement? Insights from a national survey on energy issues in Canada. *Society and Natural Resources*, 30(8), 934-948.
- Parkins, J., Beckley, T., Comeau, L., Stedman, R., Rollins, C., & Kessler, A. (2017) Trust does not enhance public engagement: Insights from a national survey on energy literacy and citizenship in Canada. *Society and Natural Resources*, 30(8), 930-948.
- Quartuch, M. R., Stedman, R. C., Decker, D. J., Siemer, W. F., Baumer, M. S., & Larson, L. R. (2017). Exploring nontraditional pathways into hunting in New York State: Implications for recruitment and retention. *Human Dimensions of Wildlife*, 22(5), 391-405.
- Raymond, C., Marketta, K., & Stedman, R. C. (2017). Sense of place, fast and slow: The potential contributions of affordance theory to sense of place. *Frontiers in Psychology*, 8, 1674.
- Robinson, K. F., Fuller, A. K., Schiavone, M., Swift, B., Diefenbach, D. R., Siemer, W. F., & Decker, D. J. (2017). Addressing wild turkey (*Meleagris gallapavo*) population declines using structured decision making. *Journal of Wildlife Management*. 81(3), 393-405.
- Schusler, T.M., Krasny, M.E., and Decker, D.J. (2017). The autonomy-authority duality of shared decision-making in youth environmental action. *Environmental Education Research*. 24(4), 533-552.
- Stedman, R. C., Larson, L. R., Tidball, K. G., Tidball, M., & Curtis, P. D. (2017). Hunting and the local food movement: Insights from central New York State. *Wildlife Society Bulletin*, 41(4), 720-728
- Tobin, D., Radhakrishna, R., Chatrychan, A., & Allred, S. B. (2017). Barriers and priorities in the northeastern U.S. to address climate change impacts on agriculture and natural resources: A strategic framework for land-grant universities. *Weather, Climate, and Society*, 9, 591-606.
- Thorn, K., Tobin, D., Radhakrishna, R., Chatrchyan, A., Chan, J. & Allred, S.B. (2017). Usefulness of delivery methods for communicating climate change issues: Perspectives of Extension professionals and research faculty in the Northeastern United States. *Journal of Extension*, 55(5). Retrieved from <https://www.joe.org/joe/2017october/a4.php>

Summary of Research Activities

Fisheries Resources Management and Policy

Great Lakes Health Collaboration to Reduce Toxics Exposure

Funded by: Minnesota Department of Health and U.S. Environmental Protection Agency, Great Lakes Restoration Initiative

Investigators: Bruce Lauber, Jeff Niederdeppe, Barbara Knuth, Nancy Connelly

Collaborators: Great Lakes Consortium for Fish Consumption Advisories

HDRU contact person: Bruce Lauber TBL3@cornell.edu

Publications:

Connelly, N. A., Lauber, T. B., Niederdeppe, J., & Knuth, B. A. (2017). Are women anglers of childbearing age following fish consumption advice in the Great Lakes region, U.S. *Journal of Great Lakes Research*, 43, 187-191.

Presentation:

Connelly, N. A., Niederdeppe, J., Lauber, T. B., McCann, P., & Knuth, B. A. (2017, July). *Impact of narrative messages on reducing fish-related consumption of mercury among women of childbearing age*. Paper presented at 13th International Conference on Mercury as a Global Pollutant, Providence, RI.

Reducing Exposure to Toxics in Urban Anglers

Funded by: U.S. Environmental Protection Agency, Great Lakes Restoration Initiative

Investigators: Bruce Lauber, Jeff Niederdeppe, Barbara Knuth, Nancy Connelly

Collaborators: Great Lakes Consortium for Fish Consumption Advisories

HDRU contact person: Bruce Lauber TBL3@cornell.edu

Publications:

Lauber, T. B., Connelly, N. A., Niederdeppe, J., & Knuth, B. A. (2017). Urban anglers' adherence to fish consumption advisories in the Great Lakes region. *Journal of Great Lakes Research*, 43, 180-186.

Lauber, T. B., Connelly, N. A., Niederdeppe, J., & Knuth, B. A. (2017). Urban anglers in the Great Lakes region: Fish consumption patterns, influences, and responses to advisory messages. *Science of the Total Environment*, 590-591, 495-501.

Forest Resources Management and Policy

Increasing Local Capacity to Protect Environmental Resources from Invasive Species

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture

Investigators: Bruce Lauber, William Siemer

Collaborators: Mark Whitmore, Sally Nourani

HDRU contact person: Bruce Lauber
TBL3@cornell.edu

Understanding and Informing Family Forest Owner Decisions of Intergenerational Land Transfer to Ensure Working Forested Landscapes

Investigators: Paul Catanzaro (University of Massachusetts), Marla Markowski-Lindsay (University of Massachusetts), Ezra Markowitz (University of Maine), David Kittredge (University of Massachusetts), Brett Butler (USDA Forest Service), Jessica Leahy (University of Maine), Kathleen Bell (University of Maine), Shorna Allred

Funded by: United States Department of Agriculture, Agriculture and Food Restoration Initiative

HDRU contact person: Shorna Allred
srb237@cornell.edu

Publication:

Markowski-Lindsay, M., Catanzaro, P., Bell, K., Kittredge, D., Leahy, J., Butler, B., Markowitz, E., Milman, A., Zimmerer, R., Allred, S. & Sisock, M. (2017). Estate planning as a forest stewardship tool. *Forest Policy and Economics*, 83, 36-44.

Water Resources Management and Policy

Understanding Factors Affecting Water Quality and Water Quality Perceptions in Mixed Use Landscapes

Investigators: Richard Stedman, Todd Walter (BEE, Cornell)

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture

Presentation:

Armstrong, A. & Stedman, R. (2017, July). *Water quality problem attribution in an agricultural and amenity watershed of central New York*. Paper presented at the 80th Annual Meetings of the Rural Sociological Society, Columbus, OH.

Wildlife Resources Management and Policy

Evaluate Public Response to Habitat Management on Wildlife Management Areas

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

Investigators: Bruce Lauber, Richard Stedman, Shorna Allred, Nancy Connelly

Collaborators: Mike Wasilco, Marcelo del Puerto, Dan Rosenblatt, Mike Putnam, Sandy Van Vranken, Jim Farquhar (NYSDEC)

HDRU contact person: Nancy Connelly
nac4@cornell.edu

Public Support for Threatened/Endangered Species Management in New York

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

Investigators: Bruce Lauber, Richard Stedman, Nancy Connelly

Collaborators: Dan Rosenblatt, Lisa Holst, Kathy O'Brien, Carl Herzog (NYSDEC)

HDRU Contact Person: Nancy Connelly
nac4@cornell.edu

Publication:
Connelly, N. A., Lauber, T. B., & Stedman, R. C. (2017). *The NYSDEC Endangered Species Program: Public awareness and support*. Human Dimensions Research Unit Publication Series 17-11. Department of Natural Resources, Cornell University, Ithaca, NY.

Turkey hunting in New York: Participation, attitudes about hunting regulations, and influences on fall hunting satisfaction

Funded by: New York State Department of Environmental Conservation (NYSDEC), Bureau of Wildlife

Investigators: Daniel Decker, William Siemer

Collaborators: Mike Schiavone, Lance Clark, Jeff Eller, Pat Vissering, Emilio Rende, Sandy Chan (NYSDEC)

HDRU contact person: William Siemer
wfs1@cornell.edu

Publication:
Robinson, K. F., Fuller, A. K., Schiavone, M., Swift, B., Diefenbach, D. R., Siemer, W. F., & Decker, D. J. (2017). Addressing wild turkey (*Meleagris gallapavo*) population declines using structured decision making. *Journal of Wildlife Management*. 81(3), 393-405.

Increasing Capacity of NY Communities to Engage Effectively in Management of White-tailed Deer

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture and Cornell Cooperative Extension

Investigators: Daniel Decker, Richard Stedman

Collaborators: Paul Curtis

HDRU contact person: Daniel Decker
djd6@cornell.edu

Publications:

Baumer, M. S., & Pomeranz, E. F. (2017). *An analysis of community-based deer management plans*. Human Dimensions Research Unit Publication Series 17-8. Department of Natural Resources, Cornell University, Ithaca, NY.

Pomeranz, E. F., Baumer, M. S., & Decker, D. J. (2017). *Community-based deer management: Planning for success*. Available online at:
<http://wildlifeplanners.org/>

Websites:

www.deeradvisor.org,
<https://canvas.instructure.com/courses/1178268>

Decision-making Process for Waterfowl Season Setting

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

Investigators: Richard Stedman, William Siemer

Collaborators: Josh Stiller, Thomas Bell, Jim Eckler, Steve Heerkens, Mike Wasilco (NYSDEC)

HDRU contact person: William Siemer
wfs1@cornell.edu

Communication to Promote Recovery of an Important Species for Agriculture: Perceptions of Risks and Benefits of Bats

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture

Investigators: Bruce Lauber, Katherine McComas, William Siemer, Heidi Kretser

Collaborators: Krysten Schuler, Carl Herzog (NYSDEC), Michelle Verant (NPS)

HDRU contact person: Bruce Lauber
TBL3@cornell.edu

Recruiting and Retaining Hunters and Trappers

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

Investigators: Daniel Decker, Michael Quartuch, William Siemer, Richard Stedman

Collaborators: Chuck Dente, K. Hamilton, Kelly Stang, Melissa Neely, Mike Schiavone, Mike Wasilco, Ken Baginski, Andrew MacDuff (NYSDEC)

HDRU contact person: William Siemer
wfs1@cornell.edu

Publications:

- Quartuch, M. R., Stedman, R. C., Decker, D. J., Siemer, W. F., Baumer, M. S., & Larson, L. R. (2017). Exploring nontraditional pathways into hunting in New York State: Implications for recruitment and retention, *Human Dimensions of Wildlife*, 22(5), 391-405.
- Larson, L. R., Stedman, R. C., Decker, D. J., Siemer, W. F., & Quartuch, M. R. (2017). Social habitats for hunting: A broader context for R3 programming. In Responsive Management and National Shooting Sports Foundation (Eds.), *Hunting, fishing, sport shooting, and archery recruitment, retention, and reactivation: A practitioner's guide* (pp. 88-91). Harrisonburg, VA: Responsive Management.

Presentations:

- Siemer, W. F., Stedman, R. C., Decker, D. J., Quartuch, M., & Dente, C. (2017, March). *Sportsman education in New York: Instructors' experiences and satisfaction*. 2017 Northeast Hunter Education Coordinators' Meeting. West Point, New York.
- Siemer, W. F., Stedman, R. C., Decker, D. J., Quartuch, M., & Dente, C. (2017, March). *Identifying non-traditional path hunters in New York*. 2017 Northeast Hunter Education Coordinators' Meeting. West Point, New York.
- Siemer, W. F., Stedman, R. C., Quartuch, M., & Decker, D. J. (2017, September). *Instructor cliques: A double-edged sword for hunter education? Pathways 2017: Integrating Human Dimensions into Fisheries and Wildlife Management*. Estes Park, Colorado.
- Quartuch, M. R., Stedman, R. C., Decker, D. J., Larson, L. R., Siemer, W. F., & Baumer, M. S., (2017, September). *Mapping the non-traditional path to hunting*. Pathways 2017: Integrating Human Dimensions into Fisheries and Wildlife Management. Estes Park, Colorado.

Other Publications on Wildlife Resources Management and Policy

Decker, D. J., Forstchen, A. B., & Schiavone, M. V. (2017). Not only for the money: Why more citizens should have a voice in state agency decisions. *The Wildlife Professional*, 11(3), 24-26.

Hare, D., Smith, C. A., Forstchen, A. B., & Decker, D. J. (2017). Developing governance principles for public natural resources. *Society and Natural Resources*, 31(3), 382-388.

McCance, E. C., Decker, D. J., Colturi, A. M., Baydack, R. K., Siemer, W. F., Curtis, P. D., & Eason, T. (2017). Importance of Urban Wildlife Management in the United States and Canada. *The Mammal Society of Japan*, 42,1-16.

Stedman, R. C., Larson, L. R., Tidball, K. G., Tidball, M., & Curtis, P. D. (2017). Hunting and the local food movement: Insights from central New York State. *Wildlife Society Bulletin*, 41(4), 720-728

Energy Management and Policy

Understanding Barriers and Opportunities for Renewable Energy Transitions in New York State

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture

Investigators: Richard Stedman, Jenny Ifft, David Kay, Bruce Lauber, Dylan Bugden

Collaborators: Chris Rondem

HDRU contact person: Nancy Connelly
nac4@cornell.edu

Presentation:

Rondem, Chris. (2018, January). *Negotiating leases for renewable energy development in New York State*. Cornell University Department of Natural Resources Research Symposium, Ithaca, NY.

Energy Leasing and Hydraulic Fracturing

Funded by: Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture and Cornell Cooperative Extension, Atkinson Center for a Sustainable Future

Investigators: Dylan Bugden, Richard Stedman, Chandler Sachs

HDRU contact person: Richard Stedman
rcs6@cornell.edu

Publications:

- Evensen, D., Stedman, R., O'Hara, S., Humphrey, M., & Andersson-Hudson, J. (2017). Variation in beliefs about 'fracking' between the UK and US. *Energy Research and Social Science*, 12, 1-10.
- Evensen, D., Stedman, R. C., & Brown-Steiner, B. (2017). Resilient but not sustainable? Public perceptions of shale gas development via hydraulic fracturing. *Ecology and Society*, 22(1).
- Evensen, D., & Stedman, R. C. (2017). Fracking as promoter and destroyer of 'the good life'. *Journal of Rural Studies*, 11, 1.
- Bugden, D., Evensen, D., & Stedman, R. C. (2017). A drill by any other name: Social representations, framing, and legacies of natural resource extraction in the fracking industry. *Energy Research and Social Science*, 29, 62-71.
- Evensen, D., & Stedman, R. C. (2017). Beliefs about impacts matter little for attitudes about "fracking". *Energy Policy*, 109, 10-21.
- Presentations:**
- Bugden, D., & Stedman, C. (2017, August) *Agency and environmental justice: The case of the shale gas industry*. American Sociological Association, Montreal, QC.
- Bugden, D., & Stedman, C. (2017, July) *Landowners and environmental justice in the shale gas industry*. Rural Sociological Society. Columbus, OH.
- Bugden, D., & Stedman, C. (2017, July) *Landowners and environmental justice in the shale gas industry*. Energy Impacts Symposium. Columbus, OH.
- Bugden, D., & Stedman, C. (2017, June) *Landowners and environmental justice in the shale gas industry*. International Symposium on Society and Resource Management. Umea, Sweden.
- Bugden, D., & Stedman, C. (2017, February) *Living with an energy lease: The case of shale gas development*. Energy Impacts Graduate Student Webinar.

Solar Information and Research Needs for New York State

Funded by: Atkinson Center for a Sustainable Future, Cornell University Agricultural Experiment Station/USDA National Institute of Food and Agriculture and Cornell Cooperative Extension

Investigators: Jenny Ifft, Richard Stedman, David Kay, Max Zhang

Collaborators: Chris Rondem, David Earl Lane, Travis Grout, Jeff Aaron Sward, Dylan Bugden

HDRU contact person: Richard Stedman
rcs6@cornell.edu

Other Publications and Presentations on Energy Management and Policy

Publications:

Parkins, J., Beckley, T., Comeau, L., Stedman, R., Rollins, C., & Kessler, A. (2017) Trust does not enhance public engagement: Insights from a national survey on energy literacy and citizenship in Canada. *Society and Natural Resources*, 30(8), 930-948.

Parkins, J., Beckley, T., Comeau, L., Stedman, R., Rollins, C. & Kessler, A. (2017). Can distrust enhance public engagement? Insights from a national survey on energy issues in Canada. *Society and Natural Resources*, 30(8), 934-948.

Presentation:

Stedman, R. C., & Measham, T. (2017, June). *Energy, place, and time: Temporal dimensions of energy transitions*. International Symposium on Society and Resource Management. Umea, Sweden.

Understanding and Managing Social-Ecological Systems

Linking Economic Globalization to Changing Traditional Social-Ecological Landscapes in Yucatan, Mexico

Funded by: N/A

Investigators: Ted Lawrence, Stephen Morreale, Richard Stedman

Collaborators: Sarah Taylor (Wichita State University)

HDRU contact person: Ted Lawrence
tjl222@cornell.edu

Presentations:

Lawrence, T. (2017, October) *Yucatec Maya community landscape conservation and sustainable livelihoods*. Paper presented at Engaged Scholarship Consortium. Birmingham, AL.

Lawrence, T. (2017, July) *How global agricultural commodity chains drive changes to traditional land tenure and land cover in Yucatan, Mexico*. Paper presented at Association for Tropical Biology and Conservation. Merida, Mexico.

Lawrence, T. (2017, January) *Rethinking conservation: Linking economic globalization to changing traditional landscapes*. Paper presented at International Society of Tropical Foresters, Yale University. New Haven, CT.

Drivers and Impacts of Biodiversity Conservation in Haiti

Funded by: US Fish and Wildlife Service, Deutsche Post DHL Group

Investigators: James Goetz

Collaborators: Fondation Seguin, Vermont Center for Ecostudies, German Agency for Intl. Cooperation.

HDRU contact person: James Goetz
jeg43@cornell.edu

Presentation:

DNR Symposium. (2017, July). *Why use open standards of practice of conservation?* Open Standards Conservation Planning Methodology Caribbean Birds Conference. Cuba.

Climate Change

Climate Science Centers: Assessing the Science, Partner Engagement and Utility for Natural Resources Conservation

Funded by: U.S. Geological Survey

Investigators: Bruce Lauber, Richard Stedman, Ashley Dayer

Collaborators: Doug Austen (American Fisheries Society)

HDRU contact person: Bruce Lauber
TBL3@cornell.edu

Publication:

Dayer, A. A., Lauber, T. B., & Stedman, R. C. (2017). *Quality and extent of partnership involvement in the Climate Science Centers in Alaska, the Northwest, and the Southeast*. Human Dimensions Research Unit Publication Series 17-04. Department of Natural Resources, Cornell University, Ithaca, New York. 102 p.

Visionmaker Jamaica Bay: Evaluation and Synthesis of Community Generated Adaptation Strategies to Enhance Resilient Ecosystems in Jamaica Bay, New York

Funded by: U.S. Department of Interior, National Park Service

Investigators: Eric Sanderson (Wildlife Conservation Society), Shorna Allred, Bryce DuBois (Rhode Island School of Design), Mario Giampieri (MIT), Kathy Bunting-Howarth (NY Sea Grant)

HDRU contact person: Shorna Allred
srb237@cornell.edu

Publications:

Giampieri, M., DuBois, B., Allred, S., Bunting-Howarth, K., Fisher, K., Moy, J. & Sanderson, E. (2017). Visions of resilience: Lessons from applying a digital democracy tool in New York's Jamaica Bay watershed. *Urban Ecosystems*, doi: <https://doi.org/10.1007/s11252-017-0701-2>

DuBois, B., Allred, S., Sanderson, E., Giampieri, M. & Bunting-Howarth, K. (2017). Introducing Visionmaker.NYC: An online landscape ecology tool to support social-ecological system visioning and planning. *Journal of Extension*. Retrieved from <https://joe.org/joe/2017december/tt8.php>

Assessing and Building Capacity for Climate Smart Farming Decisions in the Northeast

Investigators: Shorna Allred, Allison Chatrchyan (Institute for Climate Change in Agriculture), Rama Radhakrishna (Penn State University), Kaila Thorn (Penn State University), Daniel Tobin (University of Vermont)

Funded by: USDA, Agricultural Research Service

HDRU contact person: Shorna Allred
srb237@cornell.edu

Publications:

Chatrchyan, A. M., Erlebacher, R. C., Chaopricha, N. T., Chan, J., Tobin, D. & Allred, S. B. (2017). United States agricultural stakeholder views and decisions on climate change. *WIREs Climate Change*, doi: 10.1002/wcc.469

Tobin, D., Radhakrishna, R., Chatrchyan, A., & Allred, S. B. (2017). Barriers and priorities in the northeastern U.S. to address climate change impacts on agriculture and natural resources: A strategic framework for land-grant universities. *Weather, Climate, and Society*, 9, 591-606.

Thorn, K., Tobin, D., Radhakrishna, R., Chatrchyan, A., Chan, J. & Allred, S.B. (2017). Usefulness of delivery methods for communicating climate change issues: Perspectives of Extension professionals and research faculty in the Northeastern United States. *Journal of Extension*, 55(5). Retrieved from <https://www.joe.org/joe/2017october/a4.php>

Other Publication on Climate Change

Larson, L. R., Lauber, T. B., & Kay, D. L. (2017). Local government capacity to respond to environmental change: Insights from towns in New York State. *Environmental Management*, 60, 118-135.

Sense of Place

Understanding the Impact and Efficacy of Albany Pine Bush Preserve Commission Outreach and Education Programming on Conservation Awareness and Action

Funded by: Albany Pine Bush Preserve Commission

Investigators: Sarah Naiman and Shorna Allred

Collaborators: Richard Stedman, Jonathon Schuldt, Erin Kinal (Albany Pine Bush Preserve), Neil Gifford (Albany Pine Bush Preserve), Carlyn Buckler (Science Museum Studies, The Cooperstown Graduate Program).

HDRU contact person: Sarah Naiman
smn88@cornell.edu

Presentation:

Naiman, S. (2017, June). *Where did the trees go?: An investigation of the public's perceptions and support for actively managed early successional habitats*. Poster presented at the meeting of the International Association for Society and Natural Resources. Umea, Sweden.

Stakeholder Engagement and Governance

Revealing Opportunities for Local-Level Stakeholder Engagement and Social Science Inquiry in Landscape Conservation Design

Funded by: Human Dimensions Branch, US Fish and Wildlife Service

Investigators: Daniel Decker, Catherine Doyle-Capitman

Collaborators: Natalie Sexton (US Fish and Wildlife Service)

HDRU contact person: Daniel Decker
djd6@cornell.edu

Publication:

Doyle-Capitman, C. E., & D. J. Decker. (in press). *Facilitating local stakeholder participation in landscape conservation: A practitioners' guide*. U.S. Fish and Wildlife Service.

Presentations:

Doyle-Capitman, C. E. (2017, December). *Examining the Role of Human Dimensions Thinking in Landscape Conservation*. Webinar hosted by the North Pacific Landscape Conservation Cooperative.

Doyle-Capitman, C. E. & D. J. Decker. (2017, September). *Incorporating local stakeholders in collaborative landscape-level conservation*. Pathways to Success Conference: Integrating Human Dimensions into Fish and Wildlife Management, Estes Park, CO.

Doyle-Capitman, C. E. & D. J. Decker. (2017, April). *Revealing the role of local stakeholders in landscape conservation design: A social science inquiry*. Webinar hosted by the U.S. Fish and Wildlife Service's Human Dimensions Branch.

Revealing the Potential of National Wildlife Refuges to Foster Conservation Recreation and Resilience in Local Communities

Funded by: Hatch Multistate Project NE 1962 (USDA) / Cornell University Agricultural Experiment Station

Investigators: Daniel Decker, Richard Stedman, William Siemer, Catherine Doyle-Capitman

Collaborators: Natalie Sexton (US Fish and Wildlife Service), Michael Schiavone (NYSDEC) Lisa Chase (University of Vermont) Erin Seekamp, (North Carolina State University)

HDRU contact person: William Siemer
wfs1@cornell.edu

Publication:

Siemer, W. F., Larson, L. R., Decker, D. J., Stedman, R. C., Cooper, C., Doyle-Capitman, C., & Seekamp, E. (2017). *Measuring complex connections between conservation and recreation: an overview of key indicators*. Human Dimensions Research Unit Publication Series 17-3. Department of Natural Resources College of Agriculture and Life Sciences, Cornell Univ., Ithaca, NY.

Transitioning Public Engagement in Deer Management to WMU Aggregates

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

Investigators: Daniel Decker, Richard Stedman, William Siemer, Emily Pomeranz

Collaborators: Jeremy Hurst, Sue Booth-Binczik, Courtney LaMere, Ryan Rockefeller, Leslie Lupo (NYSDEC)

HDRU contact person: William Siemer
wfs1@cornell.edu

Publications:

Pomeranz, E. F., Decker, D. J., Siemer, W. F., Stedman, R. C., & Russell, J. (2017). *Evaluation of a pilot program to improve public input about deer and deer impacts*. Human Dimensions Research Unit Publication Series 17-02. Department of Natural Resources, Cornell University, Ithaca, New York. 44pp.

Siemer, W. F., Pomeranz, E. F., & Decker, D. J. (2017). *Participant evaluation of webinar series to support deer management in the Central Finger Lakes WMU Aggregate*. Human Dimensions Research Unit Publication Series 17-01. Department of Natural Resources, Cornell University, Ithaca, New York. 39pp.

Presentation:

Pomeranz, E., Decker D., Siemer, W., Hurst, J., LaMere, C., Kirsch, A., & Farquhar, J. (2017, April). *Designing regional-level stakeholder engagement processes: Striving for good governance while meeting the challenges of scale*. 73rd Annual Northeast Fish and Wildlife Conference. Norfolk, VA.

Other Publications on Stakeholder Engagement and Governance

Decker, D. J., Organ, J.F., Forstchen, A. B., Jacobson, C. A., Siemer, W. F., Smith, C. A., Lederle, P. E. & Schiavone, M. V. (2017). Wildlife governance in the 21st century - Will sustainable-use endure? *Wildlife Society Bulletin*, 41(4), 821–826.

Theory Building

Publications:

Davidson, D. J., & Stedman, R. C. (in press). Calling forth the change-makers: A quantitative application of reflexivity theory to climate change attitudes and behaviors. *Acta Sociologica*.

Ingalls, M. L., & Stedman, R. C. (2017). Identity processes in social-ecological systems a dialectical approach. *Human Ecology Review*, 23(1), 45-64.

Bennett, N. J., Roth, R., Klain, S., Chan, K., Christie, P., Clark, D., Cullman, G., Curran, D., Durbin, T., Epstein, G., Greenberg, A., Neslon, P., Sandlos, J., Stedman, R. C., Teel, T., Thomas, R., Verissimo, D., & Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93-108.

Bennett, N., Roth, R., Klain, S., Chan, K., Clark, D., Cullman, G., Epstein, G., Nelson, P., Stedman, R. C., Teel, T., Thomas, R., Wyborn, C., Currans, D., Greenberg, A., Sandlos, J., & Verissimo, D. (2017). Mainstreaming the social sciences in conservation. *Conservation Biology*, 31(1), 56-66.

Raymond, C., Marketta, K., & Stedman, R. C. (2017). Sense of place, fast and slow: The potential contributions of affordance theory to sense of place. *Frontiers in Psychology*, 8, 1674.

Masterson, V., Stedman, R. C., Enqvist, J., Tengo, M., Giusti, M., Wahl, D., & Svedin, U. (2017). The contribution of sense of place to social-ecological systems research: A review and research agenda. *Ecology and Society*, 22(1), 49.

Summary of Extension and Outreach Activities

Reintroduction of Native (Melipona) Honey Bee and Traditional Bee Keeping Knowledge in the Rural Maya Community of X-kumil, Yucatan, Mexico

Funded by: Engaged Cornell

Program Leaders and Staff: Ted Lawrence

Collaborators: Sarah Taylor, California State University, Dominguez Hills; Yucatan School of Ecoagriculture

HDRU contact person: Ted Lawrence
tjl222@cornell.edu

Presentation:

Lawrence, T. (2017, September). *Yucatec Maya community landscape conservation and sustainable livelihoods*. Engaged Scholarship Consortium conference. Birmingham, AL.

Wildlife Governance Principles Trainings for State Wildlife Agencies

Funded by: The Association of Fish and Wildlife Agencies Multistate Conservation Grant

Program Leaders and Staff: Dan Decker, Meghan Baumer

Collaborators: Ann Forstchen (FL Fish and Wildlife Conservation Commission), Mike Schiavone (NYSDEC), Chris Smith (Wildlife Management Institute), Pat Lederle (MI Department of Natural Resources)

HDRU contact person: Dan Decker
djd6@cornell.edu

Trainings/workshops: May 22-24, 2017 in Estes Park, Colorado. Participants were from agencies in AZ, CO, SD, and WY. August 28-30, 2017 in Potosi, Missouri. Participants were from agencies in IN, MN, MO, and NE.

Project website:

<https://blogs.cornell.edu/publictrustpractice/>

Legacy Planning for Landowners

Program Leaders and Staff: Shorna Allred

Collaborators: Marilyn Wyman (CCE Greene and Columbia) and Kristina Ferrare (CCE Onandaga)

HDRU contact person: Shorna Allred
srb237@cornell.edu

Presentation:

Allred, S. (2017, February). *Legacy planning for the future of your property*. NYS Farm Show. Syracuse, NY.

Strategies for Effectively Communicating about the Management of Young Forests

Funded by: Wildlife Management Institute, Ruffed Grouse Society

Program Leaders and Staff: Judy Stokes (Wildlife Management Institute), Jim Oehler (New Hampshire), Neil Gifford (Albany Pine Bush Preserve Commission), Shorna Allred, Chuck Fergus (Wildlife Management Institute), Terri Edwards (U.S. Fish and Wildlife Service), Megan Racey (U.S. Fish and Wildlife Service).

Collaborators: Marcelo Del Puerto (NYSDEC), Mike Pruss (PA Game Commission), Kelly Boland (Rachel Carson National Wildlife Refuge), Jay Jeffries (VA Department of Game and Inland Fisheries), Paul Hamelin (VT Fish and Wildlife Dept.), Joan Kennedy (NYSDEC), Ken Desmarais (NH Division of Forests and Lands), Andy Weik (Ruffed Grouse Society)

HDRU contact person: Shorna Allred
srb237@cornell.edu

Website: www.YoungForests.org

Rust to Green Binghamton's Living with Water Initiative

Funded by: USDA, Engaged Cornell

Program Leaders and Staff: Shorna Allred, Heidi Mouillesseaux-Kunzman, Paula Horrigan, Scott Peters

Collaborators: Robert Murphy (City of Binghamton), Beth Roberts (CCE Broome County), George Homsy (Binghamton University)

HDRU contact person: Shorna Allred
srb237@cornell.edu

Website: www.Rust2GreenBinghamton.com

Presentations:

Horrigan, P. & Allred, S.B. (2017, September). *Acting together: Cultivating and fostering change through creative university-community partnerships*. 2017 Community Development Institute: Building Sustainable Communities. Ithaca, NY.

Allred, S., Mouillesseaux-Kunzman, H., Clark, S., Yuan, Q., Zambito, A., Murphy, B. (2017, November). *Presentation and workshop with Binghamton officials and community members*. Living with Water Community Meeting. Binghamton, NY.

Allred, S., Mouillesseaux-Kunzman, H., Clark, S., Yuan, Q., Zambito, A., Murphy, B. (2017, November). *Presentation and discussion with Binghamton City Council members*. Living with Water City Council Meeting. Binghamton, NY.

Other Outreach and Extension Activities

James Goetz Co-facilitated (in Spanish) two 3-day workshops to develop a management plan for Sierra de Bahoruco National Park, Dominican Republic

James Goetz conducted (in Haitian Kreyòl) a week-long training workshop on using Open Standards conservation planning methodology for *Agence National des Aires Proteges* [National Agency for Protected Areas], Jacmel Haiti.

James Goetz chaired (in Spanish and English) International Bicknell's Thrush Conservation Group meeting, BirdsCaribbean Conference, Topes de Collantes, Cuba.

Daniel Decker helped to create the Community Deer Advisor (website)
<https://deeradvisor.dnr.cornell.edu/>

Daniel Decker helped with the online learning course "Creating a Community-Based Deer Management Plan (web-based learning module).
<https://canvas.instructure.com/courses/1178268>

Daniel Decker worked to introduce TN Wildlife Resource Agency to Current Applications of Human Dimensions of Wildlife Management—Nashville, TN; June 2017.

Daniel Decker worked with the Tennessee Wildlife Resource Agency: Advising deer management program team in development of strategic plan for white-tailed deer in TN.

Teaching Activities

Richard Stedman taught Society and Natural Resources (NTRES 2201). This course provides an introduction to the theory and approaches that social scientists use to understand and manage environmental issues. It is intended to (1) increase student awareness of interconnections between social phenomena and the environment in their everyday lives; (2) introduce students to a variety of social science perspectives that help us make sense of these connections; (3) identify the contributions of each of these perspectives to our understanding of environmental problems; and (4) identify how natural resource management and environmental policy reflect these perspectives. Approximately 150 students took the course.

Stedman taught a senior seminar, Human Dimensions of Social-Ecological Systems (NTRES 4320). This course emphasizes the application of theory and method to complex

contemporary cases that integrate ecological and social sciences. The course (1) exposes students to the language and theory of complex social-ecological systems; (2) ground students in the methodologies of social science; and (3) ask students to apply theory to the analysis of environmental issues. Sixteen students took the course.

Stedman also taught Community, Place, and Environment (NTRES/DSOC 6200/6201). This course is a graduate seminar that critically examines the intellectual core of community sociology and the multiple approaches to studying place. The 15 graduate students taking the course examined the theoretical and practical linkages between “community” and “place” and applied them to contemporary environmental problems occurring in localized geographic contexts.

Bruce Lauber teaches Planning for Environmental Conservation and Sustainability (NTRES 3300), a 3-credit course in the Environmental and Sustainability Sciences curriculum. The course focuses on the principles of planning as applied to environmental issues. The 17 students enrolled in the course in 2017 worked together in case study groups throughout the semester to develop management plans for current controversial environmental issues. Each student played the role of a stakeholder involved in an issue, researched the interests of the stakeholder, and advocated that those interests be reflected in the final plan developed.

Lauber, together with Cliff Kraft, also teaches Environmental Policy Processes (NTRES 4300), a required course for students concentrating in Environmental Policy and Governance. The 17 students in this course traveled to Washington D.C. for 11 days in January to study how federal environmental policies are developed in the U.S. Lauber and Kraft organized a series of guest panels to expose students to professionals active in environmental policy making – Congressional staffers and representatives of federal agencies and nongovernmental organizations. Each student organized a series of interviews while in Washington to explore policy issues of particular interest to them.

HDRU Associate Professor Shorna Allred taught Cook Community Engagement: Bridging Self, Community, and World (NTRES 4940). This course is focused on providing a platform for critical thinking and reflection within and beyond the boundaries of one's own discipline(s) through informal discussions with Cornell faculty, other invited speakers, and with each other. Students explore and learn about the breadth of disciplines at Cornell and beyond and how that relates to their own academic, personal, and professional experience.

Dr. Allred taught Global Citizenship and Sustainability: Community-Based Research Methods in Indigenous Communities (NTRES 4940). The class focuses on community cultural resilience to climate change in indigenous communities of Malaysian Borneo. The course objective is to help undergraduate and graduate students learn about global environmental problems in a local context from a combination of classroom instruction, cross-cultural learning experiences, and completion of an action research project in collaboration with

community and university partners.

HDRU Associate Professor Shorna Allred taught Agents of Change: Community Organizing for the Public Good (NTRES 4820) with co-instructors Prof. Scott Peters (Development Sociology) and Prof. Bruce Levitt (Performing and Media Arts). This team taught course engages undergraduates in the study of what it means to be an effective and ethical change agent in a democratic society. The course covers community organizing traditions, frameworks, and strategies and promising innovations emerging across the world in organizing theory and practice, and how can they be adapted for and used in different contexts and situations. We utilize tools and processes from theater, environmental justice, democratic theory, narrative inquiry, and other related fields. Course activities are process-oriented, drawing from theories of transformational and experiential learning that assist students in developing their abilities as self-directed, autonomous and socially responsible learners.

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 2017 are summarized below.

Awards and Honors

HDRU Associate Director Richard Stedman received a 2017 Atkins Center for a Sustainable Future, Faculty in Residence Fellowship.

Catherine Doyle-Capitman was selected as a 2018 Presidential Management Fellowship Finalist. Sarah Naiman was awarded the National Science Foundation Graduate Research Fellowship (NSF GRFP).

Atkinson Center for a Sustainable Future (ACSF)

Barbara Knuth serves on the Faculty Advisory Board for the Cornell Atkinson Center for a Sustainable Future and is a Faculty Fellow.

Richard Stedman serves on the Atkinson Center for a Sustainable Future Sustainability Task Force Coordinating Committee and is a Faculty Fellow.

Service and Professional Activities

Richard Stedman served on the Scientific Committee for the 2017 and 2018 International Symposia on Society and Resource Management, the Human Dimensions theme leader for the Great Lakes Fisheries Commission, the Executive Council of the International Association of Society and Natural Resources, an Associate Editor for *Rural Sociology*, the steering committee of the Cornell University Disasters Working Group, and the Cornell University Provost's Task Force on Sustainability.

HDRU Associate Director Shorna Allred was appointed as the House Professor and Dean of Alice Cook House and is currently serving the 2nd year of a 3-year term. Alice Cook House is a living and learning community comprised of upper-level undergraduate students, Graduate Resident Fellows (Cornell graduate students), and House Fellows (faculty, administrators, and community leaders) gathered in a spirit of citizenship and active intellectual and social engagement. Dr. Allred also co-chairs the West Campus House Council.

HDRU Associate Director Barbara Knuth served on the GRE Board of the Educational Testing Service, chaired its Research Committee, and served on its Technical Advisory Committee. She also was elected to the Executive Committee of the Association of Graduate Schools of the Association of American Universities.

HDRU Director Emeritus Daniel Decker was a member of the Advisory Board for International HD in Wildlife Management Pathways Conference (2017). Dr. Decker also co-organized a special session at 82nd N. Am. Wildlife and Natural Resources Conference 2017.

Catherine Doyle-Capitman was a visiting scholar at the Smithsonian National Museum of Natural History and resident expert in wildlife management and policy and human dimensions of natural resource management. She consulted with numerous Landscape Conservation Cooperatives about integrating human dimensions thinking and local stakeholder engagement into their planning processes.

International Service and Work

Shorna Allred leads the Global Citizenship and Sustainability (GCS), Community Based Research program in Southeast Asia, along with Amy Kuo Somchanhmvong of the Public Service Center at Cornell. GCS is an exchange program that fosters engaged research, global learning, student leadership and social responsibility. Cornell students in the program travel to Southeast Asia to conduct a community-based research project with community partners and Mahidol University (Bangkok) undergraduate students or Universiti of Malaysia Sarawak (Kuching) undergraduate students. These teams of students conduct community-based research with the intention of gaining a broader understanding of the complexities of environmental issues such as water resource management, flooding, and broader issues of sustainability and climate change facing our world. Students work with village leaders and farmers to conduct qualitative research to better understand experiences with flooding and climate change and how to build long-term resilience and adaptation.

Dr. Allred is working with colleagues at the Institute of Social Informatics and Technological Innovation at Universiti Malaysia Sarawak (Narayanan Kulathuramaiyer, Roger Harris, and Tariq Zaman) to bring together leaders from the Heart of Borneo to collaboratively investigate and address the adverse effects of climate change and protect Malaysian Borneo's natural environment while building the resilience of the local communities. The community-based research collaboration provides opportunities for engaged learning for students at both universities whereby they work with communities in Malaysian Borneo to investigate local problems relating to climate change and propose solutions that foster community resilience and sustainable development while recognizing the aspirations and priorities of the community members. Dr. Allred was appointed and serves as a Visiting Professor at Universiti Malaysia Sarawak.

Invited Speaker

HDRU Associate Director Shorna Allred was invited to give a seminar at the Center for People and Forests in Bangkok, Thailand. The title of her seminar was "Community-Based Forestry Perspectives on Governance and Resilience."

Dr. Allred and Prof. Paula Horrigan were invited to give the concluding talk at the Community and Regional Development Institute's (CARDI) Building Sustainable Communities conference in Ithaca, NY which brought together government and extension professionals from across NYS. The session was titled, "Acting Together: Cultivating and Fostering change through Creative University-Community Partnerships."

HDRU Graduate Student Sarah Naiman and HDRU Associate Director, Shorna Allred were invited to give a talk on "The Albany Pine Bush Preserve: Understanding Community Support and Awareness" at the Albany Pine Bush Commission Meeting in Albany, NY.