

NEW YORK COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT



2010

Annual Report

The New York Cooperative Fish and Wildlife Research Unit is embarking on a new era. Our staff is growing and research is expanding into new areas. We continue forming new relationships with our cooperators and planning research projects to address natural resource issues in New York State and beyond.

Front cover photo: Assistant Leader, Angela Fuller, holding sedated black bear.
(Photo: Craig McLaughlin)

New York Cooperative Fish and Wildlife Research Unit

2010 ANNUAL REPORT

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Cooperators:

U. S. Geological Survey
Cornell University
New York State Department of Environmental Conservation
U. S. Fish and Wildlife Service
Wildlife Management Institute

TABLE OF CONTENTS

INTRODUCTION	4
PROGRAM DIRECTION STATEMENT	5
COOPERATORS AND PERSONNEL	7
COORDINATING COMMITTEE	7
UNIT PERSONNEL.....	8
COLLABORATORS.....	9
GRADUATE EDUCATION	9
CURRENT STUDENTS.....	9
RECENT GRADUATES.....	10
COURSES TAUGHT	10
RESEARCH – FISHERIES AND AQUATIC	11
CURRENT PROJECTS.....	11
RESEARCH – WILDLIFE AND HABITATS	14
CURRENT PROJECTS.....	14
RESEARCH – ECOLOGY AND LANDSCAPES	16
CURRENT PROJECTS.....	16
PUBLICATIONS AND PRESENTATIONS	16
JOURNAL ARTICLES	16
TECHNICAL REPORTS.....	16
THESES AND DISSERTATIONS.....	17
PRESENTATIONS AND SEMINARS.....	17
ACTIVITIES	18
TECHNICAL ASSISTANCE.....	18
TRAINING AND MEETINGS ATTENDED.....	19
SERVICE	20

INTRODUCTION

The Cooperative Research Units (CRU) program was established in 1935 as a cooperative partnership between the Federal and State biological resource agencies and Land Grant universities to conduct research on managing wildlife populations and habitats, train wildlife managers, and disseminate information to management agencies. Seventy-five years later, the mission of the program remains unchanged. Now with 40 Units in 38 states, the CRU program employs over 100 scientists that conduct research on natural resource issues of importance to State and Federal agencies and other organizations, teach graduate-level courses at their host universities, and conduct workshops and short courses for their cooperators and other partners. In 2009, over 500 students were involved in conducting research and along with the Unit scientists, cooperating faculty and agency staff. Together, they produced 305 peer-reviewed publications, made 639 presentations at scientific meetings, and taught 68 academic courses and 36 workshops and short courses.

The New York Cooperative Fish and Wildlife Research Unit was established in 1961 under the leadership of Dr. Daniel Thompson. Originally established as a separate wildlife unit, the fishery unit was added in 1963 and led by Dr. Alfred Eipper. In 1984, the units were combined and led thereafter by Dr. Milo Richmond. Over its 49 year history, the New York Coop Unit has had five wildlife scientists and seven fishery scientists who have conducted research on a diversity of natural resource issues ranging most recently from assessing vertebrate biodiversity in New York State to evaluating immunocontraception of white-tailed deer to studying the ecology of Atlantic and shortnose sturgeon in the Hudson River.

The New York Coop Unit is undergoing a complete change in personnel. Dr. Mark Bain, Assistant Unit Leader-Fisheries left the CRU program in 2003 to join the faculty of the Cornell University Department of Natural Resources. Dr. Rich Malecki, Assistant Unit Leader-Wildlife retired from the CRU program in 2008 after 24 years of service to the New York Coop Unit, and Dr. Milo Richmond, Unit Leader-Wildlife, retired in 2008 after 40 years of service, all at the New York Coop Unit. Dr. Bill Fisher assumed the Unit Leader position in 2008 after serving nearly 18 years as Assistant Unit Leader-Fisheries for the Oklahoma Cooperative Fish and Wildlife Research Unit. And in 2009, Dr. Angela Fuller became the new Assistant Unit Leader-Wildlife, coming to CRU and the New York Coop Unit from the University of Maine where she was a postdoc studying the effects of forest fragmentation on mammals. A search is currently underway for the vacant Assistant Leader position, which we hope to fill in 2011.

As we approach the 50th anniversary of the New York Coop Unit, we look forward to embarking on new research directions with a fully-staffed Unit and in cooperation with our partners at Cornell University, the New York State Department of Environmental Conservation, U. S. Geological Survey, U. S. Fish and Wildlife Service, and other organizations. We see a bright future for the newly re-formed New York Coop Unit.

*The Scientists and Staff of the
New York Cooperative Fish and Wildlife Research Unit*

PROGRAM DIRECTION STATEMENT

(NOTE: This statement was developed by the previous New York Coop Unit scientists and reflects their expertise, research directions, and accomplishments.)

The New York Cooperative Fish and Wildlife Research Unit, one of 40 in a national Cooperative Research Units program, is established for the purpose of enhancing the management of this nation's renewable natural resources. Basic support for the Unit program comes from three primary cooperating agencies: Biological Resources Discipline of the U.S. Geological Survey, New York State Department of Environmental Conservation, and the New York State College of Agriculture and Life Sciences at Cornell University. Other cooperators include The Wildlife Management Institute, and the U.S. Fish and Wildlife Service. Designed to be led by three research scientists working closely with a Coordinating Committee consisting of one member from each of the cooperating agencies, priorities and opportunities are developed for programs that address fisheries and aquatic resources, wildlife and terrestrial/wetland resources, and fish and wildlife biodiversity assessment and management. These subject areas are further unified by location of the Unit in Cornell's Department of Natural Resources. The Department provides an academic setting for enhanced educational and employment opportunities for students, while facilitating collaboration with other colleges/universities, institutes, and agencies. In accomplishing our goals, we are aided by a select, highly motivated group of graduate students and research affiliates who understand scientific research and the need for application that will enhance the impact of research results.

Unique partnerships fostered by the Unit create strategic alliances between state and federal agencies, encourage research and management teamwork within agencies, and allow benchmark research among scientists. As leaders of the program, Unit personnel support well-integrated organization with broad representation that promotes creativity, full development of ideas, and a collaborative approach. Our ideas and research achievements are shared with colleagues, graduate students, and undergraduates through publication, formal teaching, seminars, lectures, and mentoring of students who seek out Unit personnel and projects to enhance their education.

Particular attention is given to the resource problems and issues of the Northeastern states, with New York as the focal point. Current themes in fisheries and aquatic resources focus on better understanding the dynamics of watersheds and large aquatic systems in the context of active human land use and development. Socioeconomic studies focus on the interplay of harbor management, navigation needs, and water levels. On the Hudson River, research focuses on ecosystem processes to increase knowledge of the estuary biota and food web and emphasize long-term and large-scale management of water resources to benefit fish and aquatic communities. Modeling techniques are being developed that integrate environmental quality, socioeconomic values, and water management. Additional attention to pressing fisheries management challenges is desired. Program themes in wildlife and terrestrial/wetland resources have addressed the ecology and management of continental populations of waterfowl, with emphasis on Canada geese, cormorants, common terns, tundra swans, mute swans, mallards, widgeon, and pintails. Studies were enhanced by telemetry using satellite-tracking technology that provided needed information on migration movements, the chronology of movements, and mortality. Computer-assisted modeling of population dynamics facilitates development of adaptive harvest management strategies designed to optimize both protection and utilization of important wildlife resources throughout North America. Research included a focus on the ecology and management needs of other native species, such as snapping turtles and black bear. Inquiry includes attention to studies of wildlife species that exceed population levels deemed acceptable or compatible with

human activities, including developing feasible alternatives to conventional harvest practices for managing these abundant species. The Research Unit continues involvement in fish and wildlife biodiversity assessment and management, responding to concerns regarding wildlife populations that are habitat-limited or otherwise less viable. Research focuses on issues of maintaining or enhancing biodiversity, population viability, and landscape-level resource inventory using a myriad of computer-assisted technologies. Application of geographic information systems (GIS) technology allows investigation and improved understanding of biological contaminant issues, land cover and land use trends, and other non-traditional wildlife-related concerns. These cutting-edge issues are readily addressed by the Research Unit and we continue to focus on them to meet State and Federal Cooperator needs. The presence of an innovative Human Dimensions Research Unit within the same Department of Natural Resources offers numerous partnering opportunities for integration of human elements of resource management with the biological dimensions. Research that combines expertise of these two units serves to expand graduate education opportunities, increase staff flexibility, and enhance planning and leadership opportunities while offering more integrated, user-oriented management and research findings. Such leadership, integration, and planning with cooperators are key to the quality research and service-oriented program that we strive to maintain.

Approved: May 17, 2006 (Minor corrections made: June 15, 2010)

COOPERATORS AND PERSONNEL

COORDINATING COMMITTEE

United States Geological Survey

MIKE TOME, Eastern Supervisor, Cooperative Research Units, Leetown Science Center, 11649 Leetown Road, Kearneysville, WV 25430

New York State Department of Environmental Conservation

PATTY RIEXINGER, Director, Division of Fish, Wildlife, and Marine Resources, 625 Broadway, Albany, NY 12233

Cornell University

MARIANNE KRASNY, Chair, Department of Natural Resources, Bruckner Hall, and

MAX PFEFFER, Senior Associate Dean, College of Agriculture and Life Sciences, Roberts Hall, Cornell University, Ithaca, NY 14853

United States Fish and Wildlife Service

DAVID STILWELL, Field Supervisor, U.S. Fish and Wildlife Service, New York Field Office, 3817 Luker Rd., Cortland, NY 13045

RICHARD O. BENNETT, Regional Scientist, U.S. Fish and Wildlife Service, Northeast Regional Office, 300 Westgate Center Dr., Hadley, MA 01035

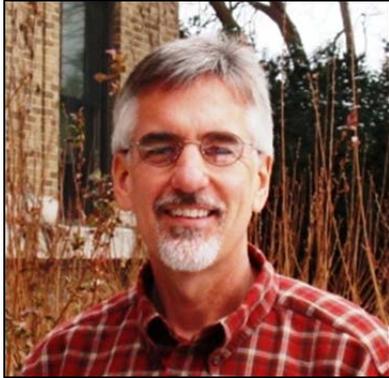
Wildlife Management Institute

SCOT WILLIAMSON, Northeast Regional Representative and Vice-President, Wildlife Management Institute, 69 Clinton Avenue, St. Johnsbury, VT 05819

UNIT PERSONNEL

Scientists

WILLIAM L. FISHER, Unit Leader-Fisheries, USGS, and Courtesy Associate Professor, Department of Natural Resources



ANGELA K. FULLER, Assistant Unit Leader-Wildlife, USGS, and Courtesy Assistant Professor, Department of Natural Resources



VACANT, Assistant Unit Leader-Ecology

Staff

MELINDA VON GORDON & ELLEN HARRIS, Administrative Assistants

Postdoctoral Research Associate

TITUS SEILHEIMER, Department of Natural Resources



COLLABORATORS

BARRY BALDIGO, U. S. Geological Survey, New York Water Science Center

GORDON BATCHELLER, New York State Department of Environmental Conservation

TOM BAUDANZA, New York City Department of Environmental Protection

MIKE FLAHERTY, New York State Department of Environmental Conservation

JIM DALEY, New York State Department of Environmental Conservation

MATTHEW HARE, Cornell University

JEREMY HURST, New York State Department of Environmental Conservation

STEVE HURST, New York State Department of Environmental Conservation

CLIFFORD KRAFT, Cornell University

JEFF LOUKMAS, New York State Department of Environmental Conservation

LARS RUDSTAM, Cornell University

GRADUATE EDUCATION

CURRENT STUDENTS

MATTHEW ADAMS, M. S., Natural Resources, Wildlife Science (Advisor: Fuller)



TYLER J. ROSS, M. S., Natural Resources, Fishery and Aquatic Science (Advisor: Fisher)



CATHERINE SUN, M. S., Natural Resources, Wildlife Science (Advisor: Fuller)



RECENT GRADUATES

None.

COURSES TAUGHT

Fisheries Ecology and Management (January 25, 2010 - May 7, 2010; 1 credit hour) - Fisher

RESEARCH – FISHERIES AND AQUATIC

CURRENT PROJECTS

Use of Telemetry to Assess Potential Effects of Schoharie Reservoir Waters on Trout Populations in the Upper Esopus Creek

INVESTIGATORS: Barry Baldigo, (USGS)
William Fisher (NYCFWRU)
Tom Baudanza (NYCDEP)
Mike Flaherty (NYSDEC)
Clifford Kraft (Cornell)

STUDENT: Tyler J. Ross, M.S.
Jackie Chen, Student Technician

SPONSORS: U. S. Geological Survey
New York State Department of
Environmental Conservation
New York City Department of
Environmental Protection
Cornell University Cooperative Extension

STARTED: August 2009



T. J. ROSS TRACKING FISH IN ESOPUS CREEK

The New York City (NYC) Watershed Protection Management Plan identified the potential adverse effects of turbid Schoharie Reservoir water discharged through the Shandaken Portal on trout populations in the Upper Esopus Creek as a priority concern. Investigators have implemented a fish radio-telemetry study to evaluate impacts of releases on trout behavior, growth, survival, and use of thermal refuges in the Upper Esopus Creek. We are assessing differences in trout 1) behavior (rates of movement and utilization of thermal refuges), 2) apparent survival, and 3) measured and modeled growth in the Esopus Creek using radio-frequency telemetry on tagged trout released upstream and downstream of the Shandaken Portal. Trout location and temperatures are being related to stream turbidity, flow, habitat, and temperature data that are being gathered in a companion study to quantify potential positive and negative effects that releases may have on physical habitat, individual trout, and their populations. Results will help resource managers better understand current thermal, turbidity, and sedimentation impacts and more accurately plan and predict (model) effects that alternative portal-release scenarios might have on habitat and trout populations in parts of the Upper Esopus Creek.

Biological Assessment of Environmental Flows for Oklahoma

INVESTIGATORS: William Fisher (NYCFWRU)

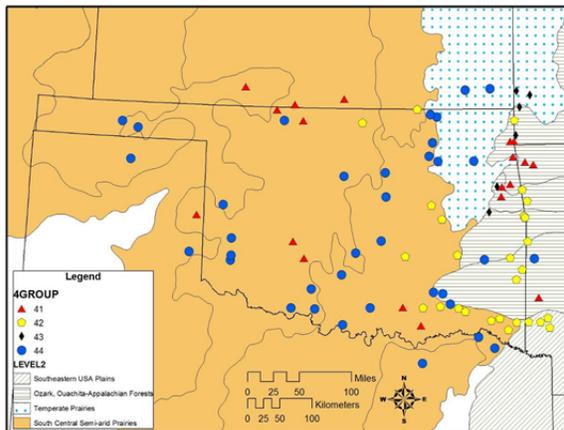
STAFF: Titus Seilheimer, Postdoctoral Associate (NYCFWRU)

SPONSORS: U. S. Geological Survey

STARTED: August 2009

Environmental flows are being considered for inclusion in the Oklahoma Comprehensive Water Plan that is currently under development. In 2008, a project was initiated by investigators at Oklahoma State University in conjunction with the U. S. Geological Survey (USGS) to assess environmental flows in Oklahoma’s perennial streams using the Hydroecological Integrity Assessment Process (HIP) developed by the USGS. The HIP approach identifies 10 non-redundant hydrologic indices that are ecologically relevant, specific to stream classes, and characterize the five components of the natural flow regime. The HIP approach has been used to set environmental flow prescriptions in New Jersey and is also being used in Missouri, Pennsylvania and Texas.

Characteristics of the indices for reference streams (e.g., frequency distributions) can be compared with those of hydrologically-modified, flow-impaired streams in the same class to quantify deviations from reference conditions. The final and most critical step of this approach is an ecological validation of the classification. A flow-response relationship is developed between the hydrologic indices within each class of reference and impaired streams, and indicators of ecological conditions (e.g., species richness, number of fluvial specialist species, population abundance). This relationship provides a benchmark to help guide environmental flow allocations for each class of streams. With the development of stream classes from the HIP analysis for Oklahoma, flow-response relationships will need to be developed for these hydrologic classes. Oklahoma has 176 species of fish and 55 species of mussels, including four fish and three mussels that are federally-listed as threatened or endangered, and many of these species are fluvial specialists that are suitable for assessing flow-response relationships in Oklahoma.



A comparison of the four-group cluster analysis stream classification and level II ecoregions of Oklahoma. Group stream classes: 41 (red triangle) – perennial run-off, 42 (yellow circle) – perennial flashy, 43 (black diamond) – stable groundwater, 44 (blue circle) intermittent.

Biomonitoring of Lower Trophic Levels in Lake Ontario

INVESTIGATORS: Lars Rudstam (Cornell)
William Fisher (NYCFWRU)

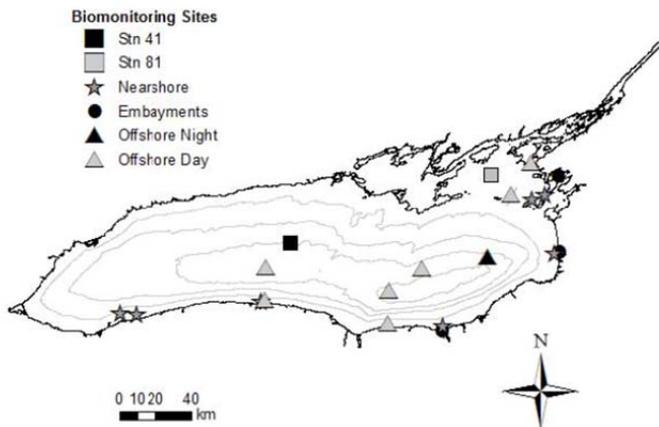
STUDENTS: Kristen Holeck, M.S.
Jim Watkins, Ph.D.

SPONSORS: U. S. Fish and Wildlife Service Cornell University
U. S. Geological Survey, Lake Ontario Biological Station
New York State Department of Environmental Conservation

STARTED: April 2010

Lake Ontario is undergoing ecological change that is affecting the food web structure and therefore the ability of the lake to support different fish species, including native species such as lake trout, Atlantic salmon, deep water and shallow water coregonids, slimy sculpin, deepwater sculpin and lake sturgeon. This study will analyze zooplankton, chlorophyll, and phosphorus samples collected as part of the New York State Department of Environmental Conservation, U. S. Geological Survey, U. S. Fish and Wildlife Service and Cornell University's biomonitoring program for lower trophic levels in Lake Ontario. The study will also provide an in-depth analysis of the status of Lake Ontario in 2010, including an analysis of time trends using data collected through this program since 1995. This collaborative program collects the most comprehensive data on lower trophic levels in Lake Ontario at this time.

Map of biomonitoring program sites in Lake Ontario, 2010.



RESEARCH – WILDLIFE AND HABITATS

CURRENT PROJECTS

Spatial Ecology and Movements of Black Bears in New York State

INVESTIGATORS: Angela Fuller (NYCFWRU)
Gordon Batcheller (NYSDEC)
Jeremy Hurst (NYSDEC)

STUDENT: Matthew Adams, M.S.

SPONSORS: New York State Department of
Environmental Conservation

STARTED: August 2010



MATT ADAMS WITH A RADIOCOLLARED BLACK BEAR

Within the last two decades, black bears in southern New York have continued to increase in abundance, which has caused an expansion of their range northward. This range expansion has resulted in increased utilization of areas with higher human densities, and landscapes with a greater proportion of agriculture. Landscapes with high proportions of developed areas and open agricultural lands have potential to increase home range size of bears and may influence the movement patterns of bears, given the lower overall habitat quality on the landscape. We are investigating how an anthropogenically fragmented landscape influences the spatial ecology, movements, and habitat selection of black bears in New York. Data from GPS-collared bears will be used to determine how movements are defining home ranges in both the core and the recently expanded populations in the southern range, and how natural fragmentation (e.g., patch type, patch size, patch distribution, road density) influences movements of bears. Additionally, we will evaluate habitat selection and temporal variation in space use between bears in the core and in the expansion areas. This research will provide an understanding of how black bears move through landscapes to help in predicting where human-bear interactions may occur in the future.

Estimating Black Bear Density Using Genetic Approaches

INVESTIGATORS: Angela Fuller (NYCFWRU)
Matthew Hare (Cornell)
Gordon Batcheller (NYSDEC)
Jeremy Hurst (NYSDEC)

STUDENT: Catherine Sun, M.S.

SPONSORS: New York State Department of
Environmental Conservation

STARTED: August 2010



CAT SUN APPLYING SCENT ATTRACTANT TO A STUDY PLOT WITH A BARBED WIRE HAIR CORRAL FOR BLACK BEARS

Recently, black bears in New York have expanded in range, merging into two large populations from three formerly distinct geographic populations (i.e., Adirondack, Catskills, Allegany populations). The Adirondack and Allegany ranges, now jointly referred to as the Southern black bear population, have been expanding into areas with agriculture and greater human densities. However, a rigorous density estimate of this expanding population does not exist. Characteristic low densities and extensive ranges of black bears make population estimates difficult, but developments in mark-recapture methods (i.e., spatially explicit capture-recapture models) enable greater accuracy and precision in estimating density. To estimate black bear density, we will conduct a non-invasive genetic mark-recapture study to collect black bear hair samples from barbed-wire snares. Individual bears will be identified using a suite of variable, mitochondrial genetic markers. These data will inform a spatially-explicit capture-recapture model to estimate population density of black bears. We will incorporate data from multiple sources (e.g., live captures, harvested dead-recoveries) and include habitat covariates at multiple spatial scales. Additionally, this study will analyze landscape genetics, potentially identifying landscape features facilitating and/or inhibiting gene flow in black bears. This small-region study will be conducted in west-central New York, and will help direct future larger-scale designs. Additionally, the research will provide information on black bear populations that will assist the New York State Department of Environmental Conservation in developing effective management strategies.

RESEARCH – ECOLOGY AND LANDSCAPES

CURRENT PROJECTS

None.

PUBLICATIONS AND PRESENTATIONS

JOURNAL ARTICLES

- Dauwalter, D. C., W. L. Fisher, and F. J. Rahel. 2010. Warmwater streams. Chapter 20 in M. Quist and W. Hubert, editors. *Inland Fisheries Management in North America*, 3rd edition. American Fisheries Society, Bethesda, Maryland.
- Fisher, W. L. 2010. GIS and spatial analyses in fisheries: challenges, opportunities and the future. Pages 3-14 in T. Nishida and A. E. Canton, editors. *GIS/spatial analyses in fishery and aquatic sciences*, volume 4. International Fishery GIS Society, Saitama, Japan.
- Fuller, A. K., and D. J. Harrison. 2010. Foraging paths reveal scale-dependent habitat decisions by Canada lynx. *Journal of Mammalogy* 91:1269-1279.
- Hearn, B. J., D. J. Harrison, A. K. Fuller, C. Lundrigan, and W. J. Curran. 2010. Paradigm shifts in habitat ecology of threatened Newfoundland martens. *Journal of Wildlife Management* 74:719-728.
- Splinter, D. K., D. C. Dauwalter, R. A. Marston, and W. L. Fisher. 2010. Ecoregions and stream morphology in eastern Oklahoma. *Geomorphology* 122:117-128.
- Splinter, D. K., D. C. Dauwalter, R. A. Marston, and W. L. Fisher. 2011. Watershed morphology of highland and mountain ecoregions in eastern Oklahoma. *The Professional Geographer* 63:1-13.

TECHNICAL REPORTS

- Echelle, A. A., R. A. Van Den Bussche, and W. L. Fisher. 2010. Conservation genetics of fish in the Blue River, Oklahoma. Final Report, U. S. Fish and Wildlife Service—U. S. Geological Survey Science Support Partnership Grant, Tulsa, OK.
- Seilheimer, T. S., and W. L. Fisher. 2009. Instream flow assessment of Mill Creek, a stream draining the Arbuckle-Simpson aquifer. Final Report, Oklahoma Water Resources Board, Oklahoma City, OK. 43 pp.
- Fisher, W. L. 2010. Black bass distribution, abundance and management in eastern Oklahoma streams. Final Report, Federal Aid Grant F-77-R, Oklahoma Department of Wildlife Conservation, Oklahoma City, OK.

- Fuller, A. K., D. J. Harrison, and W. B. Krohn. 2010. A landscape planning initiative for northern Maine using area-sensitive umbrella species. Draft contract report for The Nature Conservancy and U.S. Fish and Wildlife Service. 99 pp.
- Vashon, J., D. Harrison, A. Fuller, D. Mallett, S. McLellan, W. Jakubas, and J. Organ. 2010. Documenting the Response of Canada Lynx to Declining Snowshoe Hare Populations in an Intensively Managed Private Forest Landscape in Northern Maine. Pages 57-60 In Meyer, S. R. (Ed.). Cooperative Forestry Research Unit: 2009 Annual Report. University of Maine. Orono, Maine. 82p.

THESES AND DISSERTATIONS

None.

PRESENTATIONS AND SEMINARS

- Fuller, A. K. My Evolution as an Ecologist. Invited presentation to the Cornell Student Chapter of The Wildlife Society, Ithaca, New York. March 30, 2010.
- Fuller, A. K., D. J. Harrison, and W. B. Krohn. Balancing landscape-scale biodiversity conservation and forestry. Invited seminar to the Maine Cooperative Forestry Research Unit, University of Maine, Orono, Maine. April 14, 2010.
- Fuller, A. K. Interviewing like a professional. 66th Annual Northeast Fish and Wildlife Conference. Newton, Massachusetts. April 26, 2010.
- Fuller, A. K., D. J. Harrison, and W. B. Krohn. A Wildlife Habitat-Based Modeling Approach to Forest Landscape Planning. Paper presented at The Wildlife Society, 17th Annual Conference, Snowbird, Utah. October 5, 2010.
- Fuller, A. K. Forest Productivity and Biodiversity Conservation in Managed Landscapes: A Structured Decision Making Approach. Invited seminar in Environmental Studies Seminar Series, Alfred University, Alfred, New York. October 22, 2010.
- Fuller, A. K., D. J. Harrison, and W. B. Krohn. 2010. Managing The Nature Conservancy's Working Forest Landscape Given Multiple Biodiversity and Fiber Objectives: Final Contract Presentation to The Nature Conservancy. Brunswick, Maine. November 9, 2010.
- Fuller, A. K., D. J. Harrison, and W. B. Krohn. 2010. A Structured Decision Making Approach for Use in Forest Landscape Planning. Presented at Managing Working Forest Landscapes for Multiple Biodiversity and Fiber Objectives: A Workshop for Landowners, Land Managers, and Biologists. University of Maine, Orono, Maine. November 10, 2010.
- Fuller, A. K., D. J. Harrison, and W. B. Krohn. 2010. Planning for Multiple Biodiversity and Forest Objectives on The Nature Conservancy Lands in Northern Maine: Final Results, Application to Other Landowners, and Where Do We Go From Here. Presented at Managing Working Forest Landscapes for Multiple Biodiversity and Fiber Objectives: a Workshop for Landowners, Land Managers, and Biologists. University of Maine, Orono, Maine. November 10, 2010.

- Fuller, A. K. Applications of Structured Decision Making and Adaptive Management in Invasive Species Management. Invited talk, New York Invasive Species Research Institute, presented at the Cornell Cooperative Extension Invasive Species In-Service. November 17, 2010.
- Mallett, D. G., D. J. Harrison, and A. K. Fuller. Variable fix success of GPS collars across habitats used by Canada lynx: influences of habitat structure, topography, and satellite configuration. 66th Annual Northeast Fish and Wildlife Conference. Newton, Massachusetts. April 26, 2010.
- Ross, T.J., W.L. Fisher, B.P. Baldigo, and T.P. Baudanza. 20 January 2010. The effects of Schoharie Reservoir waters on trout populations in the Upper Esopus Creek. Cornell Department of Natural Resources Graduate Student Research Symposium, Ithaca, NY.
- Ross, T.J., W.L. Fisher, B.P. Baldigo, and T.P. Baudanza. 10 February 2010. The effects of Schoharie Reservoir waters on trout in the Upper Esopus Creek: plans and preliminary results, NY Chapter of American Fisheries Society Annual Meeting. Lake George, NY.
- Ross, T. J., B. Fisher, B. Baldigo, T. Baudanza, and M. Flaherty. 17 November 2010. Effects of altered hydrologic, turbidity and thermal regimes on rainbow and brown trout populations in the upper Esopus Creek. Catskill Environmental Monitoring and Research Conference, Belleayre Mountain, Highmount, NY.
- Seilheimer, T. S., R. A. Esralew, W. L. Fisher, and D. J. Turton. 14 September 2010. Classification of Oklahoma streams using the hydroecological integrity assessment process. 140th Annual Meeting of the American Fisheries Society, Pittsburgh, PA.
- Vashon, J. A., W. J. Jakubas, D. J. Harrison, A. K. Fuller, and J. F. Organ. Documenting the response of lynx to declining snowshoe hare populations in northern Maine. Presentation to the Maine Cooperative Forestry Research Unit, University of Maine, Orono, Maine. April 14, 2010.

ACTIVITIES

TECHNICAL ASSISTANCE

Bill Fisher:

Panel Member, Cornell University, Department of Ecology and Evolutionary Biology, Graduate Student Job Opportunities Panel, December 6, 2010

Angela Fuller:

Coordinated and facilitated a workshop on adaptive management, estimation, and monitoring tools for conservation and management for the New York State Department of Environmental Conservation. Workshop was instructed by Dr. Evan Cooch of the Department of Natural Resources at Cornell University. June 22, 2010.

Led opening discussion for the Wildlife Society Leadership Institute, Snowbird, Utah. October 1, 2010.

Managing Working Forest Landscapes for Multiple Biodiversity and Fiber Objectives: A workshop for landowners, land managers, researchers, and biologists. Orono, Maine. November 10, 2010.

TRAINING AND MEETINGS ATTENDED

Bill Fisher and Angela Fuller:

USGS, Cooperative Research Units, All-hands meeting, New Orleans, LA, March 1-5, 2010.

Northeast Fish and Wildlife Conference, Newton, Massachusetts, April 25-27, 2010.

Bill Fisher:

Oneida Lake Fisheries Team Meeting, Cornell Biological Field Station, Bridgeport, NY, March 29, 2010

Cornell Biological Field Station, Advisory Committee Meeting. June 15, 2010. Bridgeport, NY.

Participated in Trout Team meeting of New York State Department of Environmental Conservation. December 7, 2010, Cortland, NY.

Participated in Statewide (Fisheries) Database Committee meeting, New York Department of Environmental Conservation. December 9, 2010, Cortland, NY.

Bill Fisher, Titus Seilheimer, and T. J. Ross:

New York Chapter of the American Fisheries Society Annual Meeting, Lake George, NY, February 11-12, 2010.

Angela Fuller:

Introduction to Structured Decision Making, National Conservation Training Center, Shepherdstown, WV, January 11-15, 2010.

Participated in Bear Team meeting of New York Department of Environmental Conservation, Utica, NY, January 28, 2010.

Participated in Furbearer Team meeting of New York Department of Environmental Conservation, Ithaca, NY, March 10, 2010.

New York Chapter of The Wildlife Society Annual Meeting, Alexandria Bay, NY, March 12, 2010.

Adaptive Management: Structured Decision Making for Recurrent Decisions. August 9-13, 2010. National Conservation Training Center, Sheperdstown, WV.

Participated in Northeast Black Bear Technical Committee Meeting, Moultonborough, NH. August 17-18, 2010.

Pennsylvania Cooperative Fish and Wildlife Research Unit Coordinating Committee Meeting, June 14, 2010.

Structured Decision Making Workshop. September 13-17, 2010. National Conservation Training Center, Shepherdstown, WV.

Participated in Black Bear Management Team meeting of the New York Department of Environmental Conservation, Ithaca, NY, September 29-30, 2010.

The Wildlife Society Conference, October 1-7, 2010, Snowbird, Utah.

SERVICE

Bill Fisher:

President-Elect, American Fisheries Society, (August 2010 - Present)

First Vice President, American Fisheries Society, (September 2009 - August 2010)

Chair, Student Committee, New York Chapter, American Fisheries Society, American Fisheries Society, (February 2009 - Present)

Faculty Advisor, Cornell Student Subunit, American Fisheries Society, (March 2010 – present)

Member, Management Committee, American Fisheries Society, (September 2007 - Present)

Member, Governing Board, American Fisheries Society, (August 2006 - Present)

Member, Fisheries Information and Technology Section, American Fisheries Society, (January 2000 - Present)

Member, New York Chapter, American Fisheries Society, American Fisheries Society, (January 2009 - Present)

Angela Fuller:

Appointed Member, The Wildlife Society Ad-hoc Certification Review Committee (November 2009 - Present)

Member, Oversight Committee for the Cornell Center for Wildlife Conservation, (September 2010 - Present)

Member, Northeast Section of The Wildlife Society, ad-hoc student affairs committee (October 2009 - Present)

Member, The Wildlife Society Leadership Institute Committee (December 2008 - Present)

Member, College and University Education Working Group, The Wildlife Society (November 2008 - Present)

Member, Biometrics Working Group, The Wildlife Society (November 2010 - Present)

Member, Spatial Ecology and Telemetry Working Group, The Wildlife Society (November 2010 – Present)