

**MAINE AUDUBON WILDLIFE ROAD WATCH:  
NOT JUST CHICKENS CROSS THE ROAD**

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**ABSTRACT**

Maine Audubon, in partnership with the University of California Davis Road Ecology Center, Maine Department of Transportation, and Maine Inland Fisheries and Wildlife, created the Maine Audubon Wildlife Road Watch website ([maineaudubon.org/wildlife-habitat/wildlife-road-watch/](http://maineaudubon.org/wildlife-habitat/wildlife-road-watch/)) in 2010. This is a statewide online reporting system where citizen scientist volunteers contribute observations of either dead or live animals observed along roads. Roads have an enormous impact on wildlife and habitat - they fragment habitat, create barriers to wildlife travel and create a risk of collision between wildlife and people. However, there are solutions to enabling continued wildlife movement across existing roads, such as adding signs, underpasses and fencing and coordinating land use and transportation planning. However, with limited resources knowing where to most effectively implement these solutions is vital. The data collected by volunteers will be used to identify animal movement 'hotspots', and assess habitat and roads for common characteristics associated with wildlife crossings. There are four ways volunteers can participate: 1) submit observations from any roadway in the state, 2) adopt self-selected routes for regular surveys, 3) survey established endangered species routes in southern Maine, and 4) survey established routes in the Maine Western Mountains. In addition to collecting large amounts of data that would not be possible without volunteers, volunteer involvement creates a constituency of knowledgeable and supportive citizens for the implementation of solutions. To date over 460 volunteers have recorded over 3600 observations. In the spring of 2012, the subproject, Endangered Species Road Watch was initiated using the online system and volunteers were trained and assigned regular survey routes in York County. These volunteers field verify the high value habitat on both sides of the road, as identified by Maine's *Beginning With Habitat* (BWH) project through GIS computer modeling for the state endangered Blanding's turtle, black racer snake, New England cottontail and threatened spotted turtle. Newly launched in 2013 is an effort to survey targeted road segments that divide conservation lands and other areas with multiple ecological values that have been identified as important to maintain for wildlife crossings in the western Maine Mountains. This region has been identified as an important international linkage for wildlife between New Hampshire and northern Maine and Canada. Preliminary results include 'hotspots' of concentrated wildlife observations along Interstate 295 and a few other state highways which have a high number of volunteer observations. Project successes and challenges and data analysis results including hotspot identification, habitat and road characteristic associations, and BWH habitat connector associations will be discussed. Comparisons of findings with similar data and hotspot analysis of the statewide California Roadkill Observations System ([www.wildlifecrossing.net/california/](http://www.wildlifecrossing.net/california/)) will also be presented.

## BIOGRAPHICAL SKETCHES

**Barbara Charry** is a Wildlife Biologist and GIS Manager at Maine Audubon. She holds a B.A. from Grinnell College and an M.S. from Antioch New England Graduate School and has worked as an interpretive naturalist, wildlife rehabilitator, field biologist, and grassroots activist coordinator. Over the last 13 years, the focus her work has been the impacts of sprawling development on Maine's wildlife. Much of her work on road ecology has involved researching and synthesizing scientific information and sharing it with local, regional and state decision-makers. She became a state leader in this work in 2001 when Maine Audubon became a founding partner of Maine's nationally acclaimed Beginning with Habitat program, an innovative public/private partnership that provides practical tools for Maine communities to incorporate wildlife and habitat conservation into local land use planning. Under Barbara's leadership, Maine Audubon convened the first-ever state-wide conference on road ecology in Maine. She has written several guides for land use decision makers and community members on the impacts of development on wildlife including a community conservation guide, "Conserving Wildlife On and Around Maine Roads". Most recently she developed and convened Stream-Smart road crossing workshops, a statewide training effort for professionals including municipal officials.

**Fraser Shilling** received his PhD from the University of Southern California in aquatic ecology in 1991. He has investigated and published approaches for analyzing various types of watershed and landscape disturbances. He uses geographic information systems and modeling to assess risk and conditions at watershed, county, and bioregional scales to address planning, conservation, regulatory and other needs and issues. He has developed theory-based models and analyses of connectivity, as well as serving as the organizer of the biennial California Connectivity Forum. He developed and operates the online wildlife observations systems at <http://wildlifecrossing.net> and <http://wildlifeobserver.net>. He co-directs the UC Davis Road Ecology Center, the only research and education center for road ecology, and has collaborated on a half-dozen projects with Caltrans and other DOTs over the last decade.