

WHY DID THE TURTLE CROSS THE ROAD?

A new reptile monitoring project is part of a rich citizen science legacy

Are you interested in helping Maine Audubon monitor turtles?

Email us at conserve@maineaudubon.org



Spring is nearly upon us! That means Maine's native turtles will soon be on the move—and Maine Audubon staff and volunteers will be out to observe them as they make their plodding way across the landscape.

Mobility is critical for wildlife. Animals need to move in order to feed, to breed, and to survive changing weather conditions. While they're known to be slow, turtles need to move, too. Maine's turtle species generally overwinter in streams, rivers, marshes, and ponds. As winter turns into spring, they emerge from their wintering sites to bask, forage, and ultimately to breed and nest.

Unfortunately, human development and the roadways that come with it pose a major obstacle to turtles' mobility—and frequently a deadly one. We've all seen roadkill in our travels. We shake our heads and think how sad it is. But in actuality, the effect of roads on wildlife populations goes well beyond sad. It can be devastating.

It's estimated that one million vertebrates are killed on U.S. roadways each day. That's about one every 11 seconds! For slow-moving species like turtles, getting across a roadway alive is a real challenge. And for species that live a long time but don't reproduce until they're quite old (Maine's turtle species reach breeding maturity between 7-18 years of age), losing just a few breeding adults annually can lead to a declining population, or even local extinction.

But the news isn't all bleak. Citizen scientists can help! In fact, they have been helping for years. Since 2010, Maine Audubon has been organizing volunteers to document where Maine's wildlife tries to cross roads. The Maine Audubon Wildlife Road Watch (WRW) database collects roadkill observations (as well as observations of successful crossings) and helps us identify crossing areas that are particularly dangerous for wildlife.

Well before that, volunteers were conducting surveys through Maine Audubon as part of the Maine Amphibian Monitoring Project, which ended last year. For nearly two decades, a dedicated corps monitored road routes across the state, listening for frog calls at key times. They'd venture out between sunset and midnight (when calling rates are the highest)—once just as the snow was melting, to hear the Wood Frogs and Spring Peepers; again a couple of weeks later, to hear toads and Gray Tree Frogs; and again in early summer to hear American Bullfrogs and Pickerel Frogs. Their observations were invaluable and contributed to a larger effort to monitor amphibians nationally.

This year (again, with the help of volunteers—like you!), we are embarking on a new coordinated survey, in cooperation with the Maine Department of Inland Fisheries and Wildlife (DIFW), this time focused on turtles. Citizen scientists will help us survey road segments around Maine that have been identified as having high potential for turtle mortality. Some of these sites are in areas where we know rare turtles (such as the Blanding's and Spotted Turtles) have been killed on roadways, and may be at risk of population decline.

We are looking for volunteers to survey specific road segments three to four times—approximately once a month—during the turtle active season, which runs from May through September. Data can be captured using traditional datasheets, or by using the iNaturalist mobile application. iNaturalist lets you enter and check your own data while out in the field, and users can upload photographs with their entries as well.

Think you may be interested? Let us know! We'll want to get you signed up for one of three trainings we'll be offering around the state in April together with DIFW. In these sessions, we'll cover road safety, turtle identification, and how to use the iNaturalist mobile app and

paper datasheets. We'll even get out in the field, practicing safety measures and learning how to identify turtles from shell fragments (which, sadly, are often the only remaining evidence of their crossing).

We hope to see you out there!



by Sarah Haggerty, M.S.
Conservation Biologist &
GIS Manager with Maine Audubon