## Nineteen Miles

by Buck O'Herin

"...we are tied in myriad ways to the millions of earth's species. Humanity's well-being profoundly depends on biodiversity. No species is truly redundant because all contribute to an ecosystem's ability to function efficiently."

Diversity of Life, Edward O. Wilson

A few years ago, while walking in the woods near my Montville home, I crossed paths with a large black bear. It was exhilarating to be so close to the bear but what struck me most was realizing that the bear, whether living here or just passing through, is utterly dependent on the land here to provide for its needs.

Unlike me, able to drive to a grocery store to get food, the land must provide enough food and suitable habitat to support not just this bear, but other bears as well for a healthy bear population to be sustained. If the population of a species becomes too small, it is more difficult to find mates and genetic diversity can become compromised. Genetic diversity strengthens a species' ability to adapt to changing environments, resist diseases, and maintain long-term viability.

The condition of the natural world is connectivity. An ecologist friend once explained to me that the thumbs of land on the Maine coast that jut into the Atlantic Ocean will lose species of wildlife over time as these peninsulas become cut off by unplanned development. This is especially true along the Rte 1 corridor where development tends to cluster and form significant barriers. Maine State Planning Office maps indicate that within 25 years only a few towns between Bangor and Kittery will still be considered rural based on the spread of development.

Connectivity can be blocked anywhere in the landscape by development, utility corridors, and roads. As this fragmentation of the landscape occurs, areas of habitat for wildlife continue to decrease in size and become less viable for many species.

The midcoast region itself could become cut off from the rest of the state by the I-95 corridor. Strategic conservation to ensure landscape connectivity, especially for wide-ranging species with large habitat needs, is essential to prevent this isolation from happening and species being lost. Habitat loss and degradation is the largest threat to wildlife.

When explorers Lewis and Clark crossed the continent in 1804 there were no roads between the Mississippi River and the Pacific Ocean. From St.Louis they traveled

by boat on rivers or overland by horse. Today, the continental U.S. (not including Alaska) has more than 4 million miles of roads within this vast area of 2,959,064 square miles yet the furthest you can get from a maintained road is nineteen miles. More than one eighth of these roads are in our national forests.

> Even some of our largest national parks and wilderness areas in the western U.S. are not large enough to sustain healthy and stable populations of the most wideranging mammals. Landscape connectivity is needed for them to migrate and to be able to find food, breeding opportunities, and suitable habitat. Midcoast Maine is not suitable for vast areas of protected land, but we can do

a lot for the health of our natural environment and wildlife by protecting corridors of land between the larger blocks of protected land and being sure there is connectivity from our region to the rest of the state.

We need to be proactive in these efforts, especially in the face of climate change and shifting population demographics. For all of the reasons mentioned, SRLT has begun regional conservation planning with towns, neighboring land trusts and state natural resource agencies. You will hear more about these efforts in the coming months.