

Conservation Matters - Plymouth Conservation Commission - May 2016

Conservation Wildways - Defragmenting Nature's Map by Lisa Doner

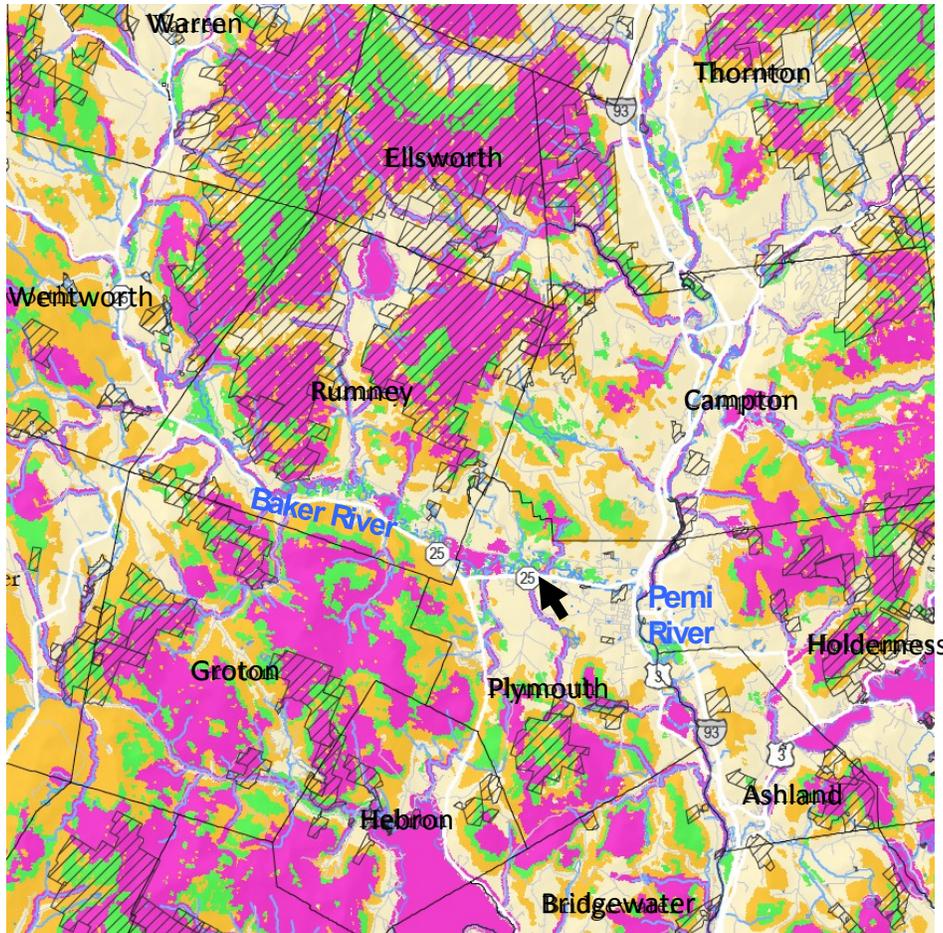
Imagine you're a frog, maybe one of the heralds of winter's end, such as a spring peeper or brown frog, or maybe a merganser duck, or a brown turtle. After a dry winter with little snow pack, your usual spring hangout has started to dry up just when you need it for egg laying. You'll have to relocate to a bigger, deeper pond that can provide good habitat throughout the hot summer months, for you and your young. The trek is treacherous, filled with stalking cats, dogs and children, zooming cars, lawn mowers, weed-whackers, skin-burning fertilizers and weed killers. Maybe you make it, maybe you don't. Relocating can be hazardous business.

People often think of nature as equivalent to the out of doors, and see it as the woods that separate one house from another or the stream that cuts through town. If you're a hiker or a paddler, then nature may also be that place you travel to where wildlife greatly outnumbers human life. But, for non-humans, nature means food, shelter and water. It must provide everything needed to survive from day to day, and to continue as a species. It must, therefore, be able to sustain the animals and plants within it. Biodiversity is a measure of how many different organisms occur in a particular area. When you look outside and see nature everywhere, it's easy to get the sense that the wild world's biodiversity is doing just fine.

But all over the world, the rural areas, and the truly wild lands around them, are shrinking, becoming fragmented with roads, housing and industrial developments, and the chemical soup of road salt and fertilizer that many people routinely use as part of winter and summer property maintenance. New Hampshire is no different. Although many of the farms that led to wide-scale deforestation in the 1800's are no longer active and trees have re-covered the land, few large properties remain intact. When owners of large lots pass on property to the next generation, a common result is subdivision. Each subdivision involves new roads and culverts to manage stream drainage and runoff. Every road poses a hazard to wildlife, every culvert a potential barrier for migration. Mowed lawns are virtual deserts, providing habitat for few species other than earthworms, crickets and moles. And, lot-by-lot, potential biodiversity of the region declines.

One way to protect biodiversity is to create and preserve inter-connected networks of high quality habitat. NH Fish and Game's 2015 Wildlife Action Plan contains a series of town maps (www.wildlife.state.nh.us/maps/wap.html) that identify habitats that still exist in the best ecological condition. These "Highest Ranked Wildlife Habitat" areas are where conservation efforts could achieve high gains by providing wildlife migration corridors that connect different types of ecosystems (forests and rivers, mountain slopes and meadows) and areas of high biodiversity. Strategically placed conservation easements, that create wildlife corridors, would allow landowners to maintain property ownership and use and, at the same time, help to mend the fragmented landscape. By protecting and connecting prime habitats in one town, and linking them similar networks in adjoining towns, New Hampshire might develop an entire system of connected, protected natural areas without any loss in private ownership or tax base. It starts with

you, and your neighbors, working together to sustain nature in its entirety, beyond the bits visible from the windows.



Color Caption: Map of high quality (top 15%) habitat in the region (green) and NH (purple). Hatched areas have conservation protection. The thin strands of purple extending out from larger high quality habitat blocks are small streams. Features like these offer wildlife opportunity to move from one large block to another. Many of these small streams are not protected and often intersect major roads, such as with Clay Brook at Tenney Mt. Highway (arrow).

B&W Caption: Map of high quality (top 15%) habitat in the region and NH (dark gray). Hatched areas have conservation protection. The thin, dark gray strands extending out from larger high quality habitat blocks are small streams. Features like these offer wildlife opportunity to move from one large block to another. Many of these small streams are not protected and often intersect major roads, such as with Clay Brook at Tenney Mt. Highway (arrow).