

## Floodplains: Plainly Important to River Integrity

Floodplains are defined as low-lying areas adjacent to rivers that are periodically flooded. In southern New Hampshire, floodplains occur up to 20 feet above the normal river height. They tend to be vegetated with wetland forest, dense shrubs, and open meadows. Oxbows (former river curves) and vernal pools are common along floodplains. The floodplain soils are usually composed of dark, fertile sediment interspersed with layers of sand.



Photo by Ben Kimball NH Division of Forest and Lands www.nhdfl.org

The photo at left of a floodplain along the Merrimack River in Concord clearly shows where flood water has left muck on the trees.



Cardinal flower at Mary Blair Park in Epping.

Photo by S. Petersen

The trees that thrive on floodplains have adapted to occasional excess water: red maples, silver maples, black ash, black cherry, swamp white oak, sycamore, river birch, muscle wood, and American elm. Some of the more noticeable understory plants are vibrant red cardinal flowers and various ferns. Because they are wet and tend to be thickly vegetated, hiking can be difficult.

In their natural state, floodplains provide excellent habitat and travel corridors for many uncommon animals. For people, these areas provide important water cleansing services as well as water storage that helps to lessen effects of flooding downstream. According to the NH Department of Environmental Services, the "Lamprey River ... contains the most extensive minor river floodplain forests of red maple/shrubs in the state."

Because of the rich soil and proximity to rivers, many floodplains have been subjected to clearing and filling for agriculture, residences, and other forms of development. As is often the case, such modifications of the natural environment come at a heavy cost, both to nature and to people. People who clear floodplains for agriculture often create conditions that increase the risk of major soil loss

during floods. The soil is picked up and carried away, and then deposited elsewhere downstream or in Great Bay. Houses and other structures built in the floodplain are exposed to repeated flooding. That nice view of the river <u>from</u> the living room can easily become the nightmare of the river <u>in</u> the living room. The people who build in the floodplain pay a heavy price and so do the people who live downstream and must face even more water.

The plain and simple truth is, floodplains are an important feature of the river and are worth leaving alone.