

Riparian Connectivity

Riparian connectivity is the connected network of streamside vegetation that provides cover for wildlife movement and also allows for plant migration over generations. This is part of a larger network of connected forests and waterways that link larger patches of habitat within a landscape, allowing for movement, migration, and dispersal of animals and plants. Riparian ecosystems are generally high in biological diversity. They are “characterized by frequent disturbances related to inundation, transport of sediments, and the abrasive and erosive forces of water and ice movement that, in turn, create habitat complexity and variability...resulting in ecologically diverse communities”.

Why is it Important?

In addition to supporting the integrity of the lakes, ponds, rivers, and streams that they border, naturally vegetated riparian areas are especially important for providing cover for wildlife movement and other important wildlife habitat, such as nesting habitat for birds. Many wildlife species use riparian corridors for travel to find suitable habitat and other life history needs, but certain species are almost entirely restricted to riparian areas, including mink, otter, beaver, and wood turtle. The linear nature of riparian areas contributes to their function as movement corridors for wildlife. Roads, development, and agricultural lands fragment the Vermont landscape. The combination of Riparian Areas for connectivity, Wildlife Road Crossings and Connectivity Blocks provide the best available paths for connectivity across the landscape, especially in highly fragmented areas of Vermont.

How was it made?

The first step in creating this product involved mapping natural cover at an even finer scale than the Habitat Blocks whose minimum size is 20ac. To do this we used the same process as habitat blocks of creating a “natural cover” layer that includes forest canopy, wetlands and shrublands and then removing roads, and development, but this time rather than eliminating blocks under 20 ac as was done for Habitat Blocks, patches less than 1 ac were removed. This creates a product that includes smaller fragments of vegetation which are still critically important when beside rivers and streams. From here, the Surface Waters and Riparian Areas dataset was used as the outer limit.

This identifies stream reaches that haven’t been developed and are travel corridors for a variety of wildlife species. Many stream sides are actively used for agriculture, which compromises their functionality as travel corridors.

All Riparian Connectivity areas are considered *Highest Priority*

Riparian Connectivity Summary



BioFinder 4.0 2023

www.BioFinder.vt.gov

To get more technical information about the Riparian Connectivity Component, see the [2023 Technical Abstract](#)