

Transitional Floodplain Forest

State Rank: S2 - Imperiled



Transitional Floodplain Forest with silver maple and ash trees and saplings, with nettles and ostrich ferns. Photo: M.W. Nelson, NHESP.

Description: Floodplain forests are deciduous forested wetland communities next to rivers and streams with annual overbank flooding and alluvial silt deposition. Transitional Floodplain Forests occur on tributaries of the Connecticut River, along the Housatonic River, and in depressions within Major-river Floodplain Forests of the Connecticut and Deerfield Rivers. Soils are intermediate in severity of flooding, soil texture, and drainage between Major-river and Small-river Floodplain Forests. Soils are silt loams or very fine sandy loams with soil mottling generally present. A surface organic layer is typically absent.

Characteristic Species: Silver maple is the dominant tree in all types of floodplain forests in Massachusetts, but associated plant species vary depending on the flooding regime and location. Vegetation of Transitional Floodplain Forests is between Major-river and Small-river Floodplain Forests. Green ash and

Transitional Floodplain Forests are silver maple - green ash - American elm forests that experience annual floods. Of the three floodplain forest community types, these communities are intermediate in vegetation and soils.

American elm are in the canopy, subcanopy, and shrub layer with silver maple. Shrubs are typically absent. Vines, particularly hog peanut and poison ivy, are abundant. The herbaceous layer is typically an even mixture of wood-nettle, ostrich fern, sensitive fern, and false nettle. Occasional associates include Gray's sedge, cat-tail sedge, and green dragon.

Differentiating from Related Communities:

All floodplain forests occur along rivers with active annual flooding and silt deposition. They differ in the size of river on which they occur and in the flooding severity. They are points in a continuum of scouring and drainage. Transitional Floodplain Forests are intermediate in severity of flooding, soil

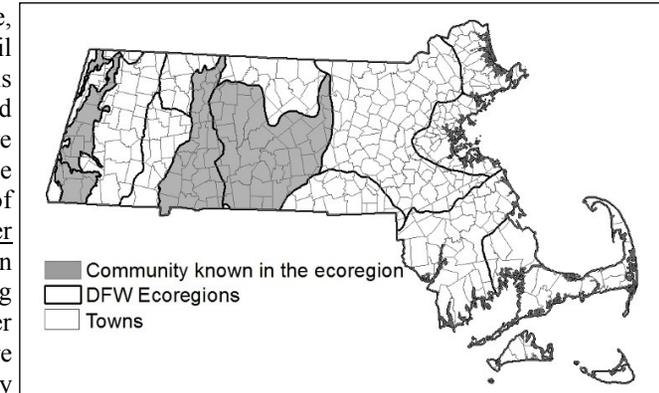


Mixed herbaceous layer with ostrich fern and nettles Photo: M.W. Nelson, NHESP.

texture, and drainage, usually without a surface soil organic layer. Cottonwood is usually absent, but ash and elm are present. Shrubs are generally absent. The herbaceous layer is a mix of species.

Small-river Floodplain Forests occur on small rivers where flooding occurs with limited water volume and scour. Soils are hydric silt or fine sandy loams, sometimes with a

surface organic layer. They also lack cottonwood and have ash and elm trees, but have a distinct shrub layer and a diverse herbaceous layer. Major-river Floodplain Forests occur along large rivers with severe flooding and scouring. Soils are predominantly not hydric and lack a surface organic layer. Cottonwood can be common in the canopy with silver maple, but few other trees are present. A shrub layer is usually absent and the herbaceous layer is often dominated by a near monoculture of wood nettle. High-terrace Floodplain Forests are on high alluvial terraces that do not flood annually and then for a short duration. They have upland trees such as sugar maple as well as floodplain species. They have more litter accumulated than other floodplain forests. Alluvial Red Maple Swamps are along low-gradient rivers and are slow to drain from flooding. Silver maple is often a codominant with red maple. Alluvial Hardwood Flat Communities are along small streams that have multiple short floods throughout the year. Black cherry and white pine are abundant in the canopy with red, but not silver, maple.



Habitat for Associated Fauna:

Transitional Floodplain Forests are part of the habitat of the wide ranging riverine and upland animals. They often contain meander scars or backwater sloughs that function as vernal pools and provide important amphibian breeding habitat. Floodplain forests are insect-rich habitats that attract warblers, thrushes and other songbirds.

Examples with Public Access:

George Darey WMA, Lenox; Canoe Meadows WS (MAS), Pittsfield; Connecticut River Access (DFG), Montague.



Transitional Floodplain Forest with patchy trees and diverse species. Photo: Michael Batchner.

