

# High-terrace Floodplain Forest

State Rank: S2 - Imperiled



High-terrace Floodplain Forest with mixed herbaceous layer and floodline visible on the nearest tree. Photo: Jennifer Kearsley, NHESP.

**Description:** High-terrace Floodplain Forests occur on raised banks adjacent to rivers and streams, on steep banks bordering high-gradient rivers in the western parts of the state, on high alluvial terraces, and on raised areas within major-river and small-river floodplain forests. In general, these communities are within the 100-year flood zone of rivers, so are river influenced, but they typically are not flooded annually as indicated by the presence of a distinct surface soil organic layer. Soils are typically silt loams. As with other types of floodplain forests and Rich, Mesic Forests, the rich soils and moist conditions make disturbed areas in them prone to invasions by exotic plant species.

**Characteristic Species:** These floodplain forests typically have species from lower floodplain forests mixed with species from mesic, upland forests. The canopy may include red, silver, and sugar maples, birches, hickories, ashes, butternut, sycamore, cottonwood, black

High-Terrace Floodplain Forests are deciduous hardwood forests that occur along riverbanks, above the zone of annual flooding. Although they do not flood annually, they flood often enough for the soil to be moderately enriched.

cherry, basswood, and elms. An open subcanopy usually includes ironwood and canopy species. The shrub layer varies from sparse to well-developed with arrowwood, nannyberry, and winterberry commonly mixed with invasive non-native shrubs including multiflora rose, Japanese knotweed, Japanese barberry, and buckthorns. The herbaceous layer is a mixture of the characteristic floodplain forest plants - sensitive fern, ostrich fern, and wood-nettle - and rich upland herbs, such as lady fern, zigzag goldenrod, white snakeroot, jack-in-the-pulpit, and bellwort. Native and non-native vines can be very dense in places.



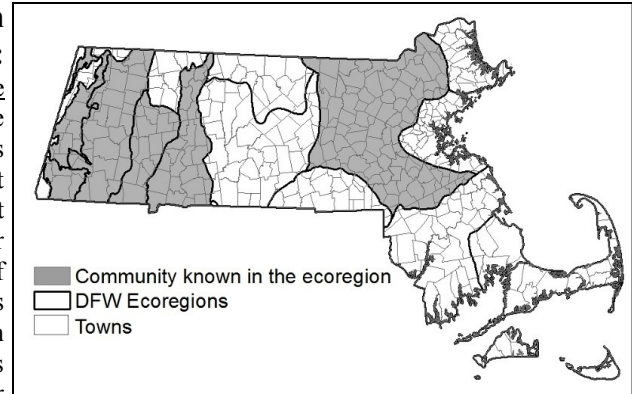
High-terrace Floodplain Forest with dense barberry patches in the otherwise diverse understory. Photo: Patricia Swain, NHESP.

## Differentiating from Related Communities:

Occurrences of High-terrace Floodplain Forests tend to be relatively small narrow forests on high alluvial terraces that flood only occasionally (not annually) and for a shorter duration than other types of floodplain forests. Less flooding typically results in more structural and species diversity than found in other floodplain forests. High-terrace Floodplain Forests are most closely related to the Transitional Floodplain Forests, Small-river Floodplain Forests, and Rich, Mesic Forests. They are sometimes seen as a hybrid between floodplain and upland forests as the vegetation composition of all layers of this forest type shares species with other floodplain forests and with Rich, Mesic Forests (for example, silver and red maple grow with sugar maple, ostrich fern with lady fern). They have more litter accumulated than other floodplain forests. Alluvial Red Maple Swamps along low-gradient rivers flood annually and are slow to drain. Silver maple is often a codominant with red maple. Alluvial Hardwood Flats are along small streams that have multiple short flooding events throughout the year after storms. Black cherry and white pine are usually abundant in the canopy with red maple, but not silver maple.

## Habitat for Associated Fauna:

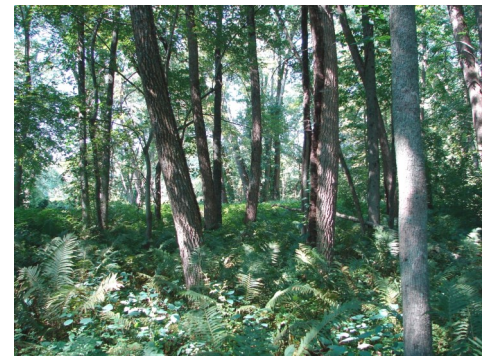
High-terrace Floodplain Forests can contain low wet depressions that function



as vernal pools and provide important amphibian breeding habitat. Being small communities, they are part of the habitat of the wide ranging riverine and upland animals.

## Examples with Public Access:

George L. Darey Housatonic WMA, Lenox; Knightville WMA, Huntington and Chesterfield; Arcadia WS (MAS), Northampton; Bolton Flats WMA, Bolton and Lancaster.



High-terrace Floodplain Forest with diverse canopy and herbaceous layers. Photo: Michael Batcher.

