

**Community Name:** ALLUVIAL HARDWOOD FLAT  
**Community ELCODE:** CP1A2A4000  
**SRANK:** S2



**Concept:** Fairly open hardwood forests on alluvial flats along small rivers and large streams.

**Environmental Setting:** Alluvial Hardwood Flat forests occur along moderate gradient reaches of small rivers and large streams where flooding is of short duration although intense as the small watersheds respond rapidly to local weather events. The soils tend to be coarse sand and gravel with mesic to locally hydric moisture regimes.

**Vegetation Description:** White Pines (*Pinus strobus*), substantially taller than the hardwood canopy, are sparsely emergent above the canopy. The sparse to closed tree canopy has Black Cherry (*Prunus serotina*) co-dominant with Red Maple (*Acer rubrum*) and scattered American Elm (*Ulmus americana*), White Ash (*Fraxinus americana*), Sugar Maple (*Acer saccharum*), and White Pine. The mid-story layer consists of saplings of the tree species, plus Ironwood (*Carpinus caroliniana*), Smooth Shadbush (*Amelanchier arborea* var. *laevis*), Alternate-leaved Dogwood (*Swida* (formerly *Cornus*) *alternifolia*), Witch Hazel (*Hamamelis virginiana*), and blackberry (*Rubus alleghaniensis*). A wide variety of shrubs and saplings are consistently present, but never at high density. Tree species that are absent from the canopy such as Red Oak (*Quercus rubra*), Paper Birch (*Betula papyrifera*), and Eastern Hemlock (*Tsuga canadensis*) are common in the shrub layer. The herb layer is dense and species-rich; with mesic herbs, ferns, grasses and sedges well-represented. Herb community structure varies from stand to stand and often has patchy within-stand structure. Woodgrass (*Brachyelytrum aristosum* (formerly *septentrionale*)) and New York Fern (*Parathelypteris* (formerly *Thelypteris*) *noveboracensis*) are two characteristic species normally present and often with substantial cover in dominance patches. Fairly common herbaceous layer plants are Jack-in-the-pulpit (*Arisaema triphyllum*), Lady Fern (*Athyrium filix-femina* var. *angustum*), Sensitive Fern (*Onoclea sensibilis*), Interrupted Fern (*Osmunda claytoniana*), Bristly dewberry (*Rubus hispidus*), and Tall Meadow-rue (*Thalictrum pubescens*) The non-native invasive shrub Glossy Alder-buckthorn (*Frangula alnus*) is often encountered, but seldom at high densities. Meander scars support pockets of diverse wetland vegetation and, sometimes aquatic species.

**Associations:** No associations have been described in Massachusetts. This community is related to both High-terrace Floodplain Forests in its rich aspects and to Alluvial Red Maple Swamps.

**Habitat Values for Associated Fauna:** Alluvial Hardwood Flats provide shade for the associated stream and filter water coming from surrounding uplands, improving water quality for the fish and other animals of the stream. Being small communities, they are part of the habitat of the wide ranging riverine and upland animals. Old meander scars and depressions without fish provide vernal pool habitat.

**Associated rare plants:** none known

**Associated rare animals:** none known

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

**Examples with Public Access:** Tully Lake Project, USACE; Royalston Falls Reservation, TTOR

**Threats:** Invasives

**Management Needs:**

**Synonyms:**

**USNVC/NatureServe** Acer rubrum - Prunus serotina / Cornus amomum Forest, CEG006503.

**MA (old name):**

**ME:**

**VT:**

**NH:** Swamp white oak floodplain forest

**NY:**

**CT:**

**RI:**

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