

# Riverine Pointbar and Beach Community

State Rank: S4 - Secure



Riverine Pointbar on a smaller river. Photo: Patricia Swain, NHESP.

**Description:** Riverine Pointbar and Beach Communities occur on sands and gravels deposited in the channel below the streambank on the insides of meander curves. River currents move faster on the outside of a turn and more slowly on the inside. Coarser sediments settle on the outside, where velocity is higher, with finer sediments on the inside, nearer to the shoreline. Flooding and ice scour limit the extent to which woody vegetation can become established. Constant flooding, scouring, and deposition limit soil development. Pointbars and beaches can move around in the channel depending on water dynamics.

**Characteristic Species:** The vegetation tends to be sparse, with bare sand or gravel dominating, at least on the most recently exposed areas; it is patchy, flood battered, and highly variable with seasonal and spatial zonation. Herbaceous and graminoid vegetation dominates in more frequently flooded areas with woody vegetation where less frequently flooded. Plants start growing as water levels go down, so the areas closer to the uplands

Riverine Pointbar and Beach Communities occur on exposed sand or gravel river bars and beaches on all sizes of high-energy streams during low water periods. This often sparsely vegetated community tends to get larger as summer progresses.

tend to start growing sooner in the spring, and lower areas may have young plants into the summer. Scattered tall beggar's ticks is typical with smartweeds, cocklebur, spike-sedges, club-sedges, flatsedges, and lovegrasses. On smaller rivers cardinal flower often grows on pointbars. Most sites have non-native, weedy species that may include barnyard grass, crab-grass, chickweeds, and members of the mustard family along with purple loosestrife and Japanese knotweed.



Riverine Pointbar with cardinal flowers. Photo: Patricia Swain, NHESP.

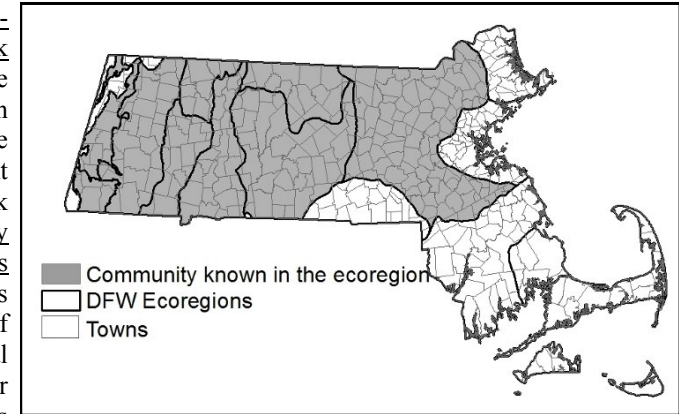
**Differentiating from Related Communities:** Riverine Pointbar and Beach Communities are in high energy stream channels on sand or gravel. River and Lake Drawdown Communities develop on sediments exposed in reservoirs and behind dams when water

levels are lowered. High-energy Riverbank Communities occur on the banks of fast flowing, high energy rivers with sparse plants growing in sediment caught between rock cobbles. Low-energy Riverbank Communities are on slopes of river banks composed of a mix of relatively fine mineral materials (clay, silt, or sand). The communities may include scattered shrubs or trees along with herbaceous species. Freshwater Mud Flat Communities have low, sparse annual herbaceous vegetation on recently exposed muddy (fine mixed organic and mineral materials) sediments in river backwaters and ponds where they may include stranded aquatic vegetation.



Exposed Riverine Pointbar along a major river. Photo: Bruce A. Sorrie, NHESP.

**Habitat for Associated Fauna:** Few animals are restricted to these patchy, often ephemeral communities, but wide ranging animals include Riverine Pointbar and Beach Communities as part of their habitats. Shore birds forage on sand bars during their breeding season and during migration. Turtles nest in drier parts of



point bars and beaches. The larvae of several species of tiger beetle live in burrows in sandy point bars and beaches and the adults hunt the same areas. Many river dragonflies include pointbars and beaches in their hunting territories.

**Examples with Public Access:** Robinson SP, Agawam; Colebrook River Lake (ACOE, Farmington River), Sandisfield; Tully Lake property (USACE), Royalston.



Riverine Pointbar and Beach abutting a floodplain forest. Photo: Jennifer Kearsley, NHESP.

