

# Sandplain Heathland - Inland Variant

State Rank: S2 - Imperiled



Sandplain Heathland - Inland Variant where invading pines are being removed. Photo: Patricia Swain, NHESP.

**Description:** Sandplain Heathlands - Inland Variant occur away from the coast, on sand or gravel deposits including dry riverside bluffs (20 to 50 foot high erosional gravel cliffs next to rivers). The rugged environment has intense sunlight, extreme daily and seasonal temperature variations, and nutrient-poor droughty soils. Like coastal Sandplain Heathlands, the Inland Variants are open, nearly treeless shrublands often dominated by low-growing shrubs. Plant cover ranges from nearly continuous to sparse with bare soil or lichen between clumps of plants. Some occurrences are variably sized openings in Pitch Pine - Scrub Oak Communities, often in depressions (frost pockets) on sandplains where unpredictable late season frosts inhibit growth of many species, including most trees. Other pre-European settlement

Sandplain Heathland - Inland Variant is an often semi-natural, usually successional, low shrub community on sandplains, gravel, or gravel/sandy cliffs next to rivers in interior parts of the state that needs management to remain treeless.

occurrences were likely small patches in successional mosaics on drought-prone soils maintained by disturbances including fires. Current occurrences were likely enlarged or created by past land use - land clearing and farming - on low nutrient soils. Fire has been important in at least, some situations, especially on drier south and southwest facing slopes. Without disturbance or management, succession to woodland and forest occurs.



Lupine growing in a Sandplain Heathland - Inland Variant. Photo: Patricia Swain, NHESP.

**Characteristic Species:** Sandplain Heathland - Inland Variant are composed of low-growing plants, including several species that can reproduce clonally. Overall diversity is fairly low, with heath (blueberry family) shrubs forming an extensive, dense low shrub layer dominated by low sweet blueberry, early sweet blueberry, and/or black huckleberry with sweet fern, bearberry, scrub oak, American hazelnut, New Jersey tea and/or sheep-laurel. Scattered individuals or patches of taller shrubs may include tree saplings from the surrounding forest, particularly pitch or white pine, gray or white birch, trembling aspen, or red maple. Trailing arbutus and teaberry are usually present, the latter abundant only

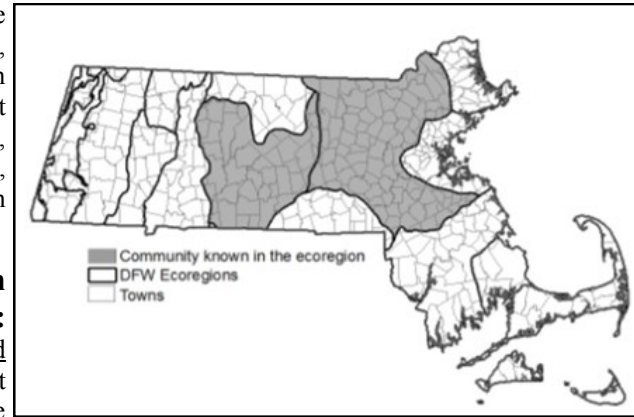
on untilled soils. Little bluestem grass, poverty grass, and hairgrass typically occur in the sparse herbaceous layer that may also include goat's rue, stiff aster, woodland sunflower, and wild lupine between patches of shrubs.

## Differentiating from Related Communities:

Sandplain Heathlands - Inland Variant are located inland at distances away from maritime influences. Sandplain Heathlands are near the coast within the salt spray zone of storms. Ridgetop Heathlands occur on bedrock, often as semi-natural expansions of edges of Rocky Summit/Rock Outcrop Communities or old blueberry farms. Pitch Pine - Scrub Oak Communities are dominated by scrub oak with abundant pitch pine, neither of which is dominant in Sandplain Heathlands. Very small patches of Sandplain Heathland - Inland Variant inside a Pitch Pine - Scrub Oak Community may be considered to be variation in the Pitch Pine - Scrub Oak Community occurrence. Sandplain Heathlands - Inland Variant are and look shrubbier than Sandplain Grasslands - Inland Variant which are dominated by grasses.

## Habitat for Associated Fauna:

Most occurrences of Sandplain Heathlands - Inland Variant are small and would often be only part of the habitat of most mobile animal species. Meadow voles, short-tailed shrews, and white-footed mice are often abundant near or under shrubs. White-footed mice are known to be one host of the deer tick that



carries Lyme and other diseases. Invertebrates of Sandplain Heathlands - Inland Variant include butterflies such as hairstreaks and skippers. State rare species include slender clearwing sphinx moth, pink swallow moth, and the delisted blueberry swallow moth.

## Examples with Public Access:

Montague Plains WMA, Montague; Barre Heathland, DCR Ware River Watershed Area, Barre; Clinton Bluff WMA, Clinton.



Linear Sandplain Heathland - Inland Variant along the shore of the Quabbin with dense lowbush blueberry mixed with grasses. Photo: Chris Buelow, NHESP.

