Sandplain Grassland

State Rank S1 | Similar Types

Community Description

These grassland barrens are expanses of graminoid and dwarf shrub vegetation dominated by poverty oatgrass, little bluestem, woodland sedge, and lowbush blueberry. Northern blazing star, a globally rare wildflower, is a dominant forb at the one viable Maine occurrence of this community. Local dominants include sweetfern and black chokeberry. Species allied with pine barrens are frequent, such as gray birch, whorled loosestrife, and wood lily. Bryoids are sparse, and up to 30% of the ground is unvegetated, usually with some graminoid or shrub litter.

Soil and Site Characteristics

These grasslands occur on flat sandy plains or deep outwash deposits. Soils are extremely well drained and acidic. Historically, fire was important in maintaining these communities and is now being used as a management tool.

Diagnostics

Canopy cover is less than 15%; tall shrub layer is patchy but less than 25%. Poverty oatgrass, little bluestem, and woodland sedge are the dominant graminoids, often over a layer of lowbush blueberry. Pitch Pine - Scrub Oak Barrens and Pitch Pine - Heath Barrens share many species, but have well developed shrub and/or tree layers. Hudsonia River Beach also features little bluestem, but blueberry is scarce or absent and the riverside setting is distinctive.

Conservation, Wildlife, and Management Considerations

The one viable Maine site is in conservation ownership and is managed for the rare community, rare animals, and rare plants that occur there. Prescribed burning is a major management tool. This type appears to have been more common in southern

Location Map





Main Photo: Sandplain Grassland Inset: Black Racer

Maine historically, but most nearby sites that might have supported this community have either been developed or have transitioned to other types due to lack of fire.

This community provides nesting habitat for several rare ground nesting grassland birds including the grasshopper sparrow, upland sandpiper, and short-eared owl. These open grasslands also provide excellent habitat for a rare snake, the northern black racer. The cobweb skipper inhabits open dry fields with bluestem grasses, which it uses as its larval host plant. Several historical butterfly and moth species that may have inhabited formerly large tracts of this community include the graceful clearwing, persius dusky wing, and frosted elfin.

Distribution

Extreme southern Maine, extending southward along the Atlantic Coast to Cape Cod (Eastern Broadleaf Forest Province).

Landscape Pattern: Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Sapling/shrub

Gray birch Pin cherry Pitch pine Sweetfern Thicket shadbush

Dwarf Shrub

Black chokeberry Lowbush blueberry*

Herb

Arrow-leaved violet Little bluestem* Northern blazing star* Pinweed Poverty oatgrass Sharp-pointed ricegrass Silverrod Whorled loosestrife Woodland sedge*

Associated Rare Plants

Clothed sedge Dry land sedge Northern blazing star Upright bindweed White-topped aster

Associated Rare Animals

Cobweb skipper Grasshopper sparrow Northern black racer Short-eared owl Upland sandpiper

Examples on Conservation Lands You Can Visit

Kennebunk Plains Preserve - York Co.