



### Sandplain Grassland – Inland Variant

- Community Code:** CT2B2A2000
- State Rank:** S2
- Map:** No Sandplain Grasslands – Inland Variant are documented in the NHESP database.
- Concept:** An often semi-natural open community, visually dominated by native grasses on sandplains or gravel in interior parts of the state, that usually needs management to remain treeless in the absence of fire. The community occurs in the surroundings of inland airports, and on military lands and wildlife management areas on sandplains.
- Environmental Setting:** Sandplain Grasslands - Inland Variants are open (essentially treeless), often semi-natural communities, visually dominated by native grasses and herbaceous species with sparse shrubs and patches of bare soil and lichens. They occur inland outside the influence of coastal storms and salt spray, primarily on sandplains or gravel (droughty, low-nutrient soils) and usually need management to remain open in the absence of fire or other disturbance. Otherwise, these grasslands generally succeed to forest. Surroundings often include Pitch Pine - Scrub Oak Communities. Many sites have been severely disturbed in the past which has slowed succession to woody species, but which has also allowed establishment of non-native species. The community occurs at small inland airports, along powerline rights of way, and on military lands and wildlife management areas on sandplains, all areas that are managed to exclude tall woody plants. Many current inland grasslands are the result of extensive clearing for agriculture that occurred with European settlement, some as expansions of original smaller occurrences and others created on poor sandy soils cleared of trees for grazing and crops.
- Vegetation Description:** Sandplain Grasslands - Inland Variant are dominated by graminoids, usually little bluestem (*Schizachyrium scoparium*), Pennsylvania sedge (*Carex pensylvanica*), and poverty grass (*Danthonia spicata*), often with many non-native species, especially many non-native grasses. These communities generally include a mix of herbaceous species such as goldenrods (*Solidago* and *Euthamia* spp.), milkweeds (*Asclepias* spp.) including butterflyweed (*A. tuberosa*), and occasionally New England blazing star (*Liatris scariosa* var. *novae-angliae*). There may be fewer shrubs than occur in coastal grasslands, although sweet fern (*Comptonia peregrina*) can form large patches, particularly in inland areas, and dewberries (*Rubus flagellaris* and *R. hispidus*) may be abundant in either. White pine is often the first tree to invade inland grasslands, with clonal species such as aspen (*Populus tremuloides*) and sumac (*Rhus* spp.) expanding from the edges.
- Differentiating Occurrences:** Sandplain Grasslands - Inland Variant are located inland away from maritime influences, out of even the storm salt spray zone, and, although on sandy soils, require regular management to stay open. The Inland Variant has fewer coastal species than the main, coastal Sandplain Grassland community: the Inland Variant lacks sandplain flax (*Linum intercursum*), golden heather (*Hudsonia ericoides*), and sandplain blue-eyed grass (*Sisyrinchium fuscatum*). The Inland Variant often has an



abundance of non-native and weedy species. Sandplain Heathlands - Inland Variant grade into Sandplain Grasslands - Inland Variant. Sandplain Heathlands - Inland Variant are and look shrubbier than grasslands, which look grassy. The visual appearance of being dominated by lowbush blueberry, scrub oak, or black huckleberry is a key difference from grasslands. Small patches of Sandplain Grasslands - Inland Variant in a mosaic with other communities are difficult to map and may be considered to be part of the variation of the prevailing community. Cultural Grasslands as a classification unit are intended to be grasslands that are cultivated or the results of cultivation with non-native, agricultural grasses (pastures and hayfields were the models). When communities are not distinct, the best fit should be named.

**Associated Fauna:**

Location in the state and size of the grassland strongly affect the species that use grasslands. Many species of birds that use grasslands are more common in the midwestern prairies and agricultural fields. Airports currently support Massachusetts' largest populations of Upland Sandpipers (*Bartramia longicauda*), Grasshopper Sparrows (*Ammodramus savannarum*), and Savannah Sparrows (*Passerculus sandwichensis*). Other grassland birds include Killdeer (*Charadrius vociferus*), Eastern Meadowlarks (*Sturnella magna*), and Horned Larks (*Eremophila alpestris*). Meadow voles (*Microtus pennsylvanicus*), meadow jumping mice (*Zapus hudsonius*), and northern short-tailed shrews (*Blarina brevicauda*) would be expected in most grasslands. They would be hunted by garter snakes (*Thamnophis sirtalis*), long-tailed weasels (*Mustela frenata*), and American Kestrels (*Falco sparverius*), as well as wintering Northern Harriers (*Circus cyaneus*), Snowy Owls (*Nyctea scandiaca*), and Short-eared Owls (*Asio flammeus*). Lepidopteran fauna includes some species of sandplain grasslands, such as sandplain euchaena, a geometrid moth (*Euchlaena madusaria*, Special Concern).

**Public Access:**

Southwick WMA, Southwick; Montague Plains WMA, Montague.

**Threats:**

Succession; development; ATV disturbance.

**Management Needs:**

Mowing and grazing, in addition to fire, are required to maintain these communities. Fire management plans should be produced and followed to introduce prescribed fire to the best examples. Reduce exotics where possible.

**USNVC/NatureServe:**

A3934 *Poa compressa* - *Solidago nemoralis* - *Centaurea biebersteinii* Ruderal Dry Meadow and Shrubland Alliance - CEGLO06333 *Schizachyrium scoparium* - (*Andropogon virginicus*) - *Solidago* spp. Ruderal Herbaceous Vegetation.