

V.A.5.N.n.7. PHRAGMITES AUSTRALIS TIDAL HERBACEOUS ALLIANCE

Common Reed Tidal Herbaceous Alliance

Physiognomic Class Herbaceous Vegetation (V.)
Physiognomic Subclass Perennial graminoid vegetation (grassland) (V.A.)
Physiognomic Group Temperate or sub-polar grassland (V.A.5.)
Physiognomic Subgroup Natural/Semi-natural (V.A.5.N.)
Formation Tidal temperate or subpolar grassland (V.A.5.N.n.)

**Alliance PHRAGMITES AUSTRALIS TIDAL HERBACEOUS ALLIANCE
(V.A.5.N.n.7.)**

Phragmites australis Tidal Herbaceous Vegetation

Common Reed Tidal Herbaceous Vegetation

Reed-grass Marsh

CLASSIFICATION CONFIDENCE LEVEL: 2

USFS WETLAND SYSTEM: ESTUARINE

RANGE:

Fire Island National Seashore

This association occurs in salt marshes on Fire Island.

Globally

Widespread along the coast of southern and eastern United States and north into Canada.

ENVIRONMENTAL SETTING:

Fire Island National Seashore

This community occurs in tidal salt marshes where soil disturbance has occurred. The substrate is characterized by shallow peat over sand.

Globally

This association occurs in a range of tidal wetland habitats from fresh to brackish in salinity. Although in some associations *Phragmites australis* may be a native component, in salt marshes its robust clonal habit excludes other species and generally indicates disturbance in soil or tidal flooding.

MOST ABUNDANT SPECIES:

Fire Island National Seashore

| <u>Stratum</u> | <u>Species</u> |
|----------------|-----------------------------|
| Herbaceous | <i>Phragmites australis</i> |

Globally

| <u>Stratum</u> | <u>Species</u> |
|----------------|-----------------------------|
| Herbaceous | <i>Phragmites australis</i> |

CHARACTERISTIC SPECIES:

Fire Island National Seashore

Phragmites australis

Globally

Phragmites australis

VEGETATION DESCRIPTION:

Fire Island National Seashore

This tall tidal grassland is dominated by dense stands of *Phragmites australis*, which tends to form a monoculture where it occurs. *Baccharis halimifolia* is a short shrub occurring in smaller patches beneath the *Phragmites*. *Toxicodendron radicans* forms a sparse vine layer. *Pluchea odorat*, *Impatiens capensis*,

USGS-NPS Vegetation Mapping Program
Fire Island National Seashore

Mikania scandens and *Cyperus polystachyos* occur locally at the edges of the wettest parts of the brackish swales and generally have very low percent cover.

Globally

This community is a dense tall grassland that is generally indicative of disturbance. It occurs in a range of tidal wetland habitats from fresh to brackish in salinity. This community is a broadly defined reed-grass marsh. It is characterized by dense stands of *Phragmites australis*, a species which tends to grow in colonies of tall, stout, leafy plants often to the exclusion of all other vascular plant species. Associated species are highly variable, depending on the community that has been invaded. Spreading in large colonies, *Phragmites* eventually dominates disturbed areas at coverage up to 100%. More typically, though, scattered individuals of other species may occur, such as sparse *Myrica cerifera* shrubs, *Kosteletzkya virginica*, *Calystegia sepium*, *Boehmeria cylindrica*, *Typha angustifolia*, *Apocynum cannabinum*, *Rosa palustris*, *Polygonum* sp., and *Mikania scandens*. Vines of *Toxicodendron radicans* are also frequent, but typically occur at low cover. This community has a broad geographic range, including coastal areas of the eastern United States and Canada.

COMMENTS:

Fire Island National Seashore

Globally

Although *Phragmites australis* rhizomes have been noted in salt marsh sediments exceeding three thousand years in age (Niering and Warren 1977) and is thus a native component of salt marshes in some areas in North America, the growth of the species in its native condition was likely to have been significantly different than the dense monotypic stands that characterize this community in parts of its range today. The presence of the *Phragmites australis* community in wetlands today generally indicates human-induced disturbance, either through direct habitat manipulation or through passive introduction of reproductive material to naturally disturbed substrates. In cases where *Phragmites australis* is a significant component of the vegetation but the vegetation retains sufficient species composition to retain its identity, the site is considered an unhealthy or degraded example of that original community. On the other hand, in cases where *Phragmites australis* cover is so high that native species have been excluded and the original community is no longer recognizable, the occurrence is then treated as an example of the V.A.5.N.n *Phragmites australis* Tidal Herbaceous Alliance (A.1477)

States/Provinces: AL:S?, CT:S?, DE:S?, FL:S?, GA:S?, LA:S?, MA:S?, MD:S?, ME:S?, MS:S?, NC:S?, NF?, NH:S?, NJ:S?, NS?, NY:S?, PA:S?, PE?, QC?, RI:S?, SC:S?, TX:S?, VA:S?

OTHER NOTEWORTHY SPECIES:

CONSERVATION RANK: GW (97-11-22)

DATABASE CODE: CEGl004187

MAP UNITS: FIIS plot 20

REFERENCES:

Metzler and Barrett 1996
Niering and Warren 1977