

III. Shrubland

III.B.2.N.a.9. MYRICA PENSYLVANICA - (PRUNUS MARITIMA) SHRUBLAND ALLIANCE

Northern Bayberry - (Beach Plum) Shrubland Alliance

Physiognomic Class Shrubland (III.)
Physiognomic Subclass Deciduous shrubland (III.B.)
Physiognomic Group Cold-deciduous shrubland (III.B.2.)
Physiognomic Subgroup Natural/Semi-natural (III.B.2.N.)
Formation Temperate cold-deciduous shrubland (III.B.2.N.a.)

**Alliance MYRICA PENSYLVANICA - (PRUNUS MARITIMA) SHRUBLAND
 ALLIANCE (III.B.2.N.a.9)**

Myrica pensylvanica - Rosa rugosa Shrubland

Northern Bayberry - Rugosa Rose Shrubland

CLASSIFICATION CONFIDENCE LEVEL: 2

USFS WETLAND SYSTEM: N/A

RANGE:

Fire Island National Seashore

This association is common on occurs on Fire Island, occurring on the more protected portions of the primary dune along the length of the island.

Globally

This association occurs on maritime sand dunes from Delaware north to central Maine.

ENVIRONMENTAL SETTING:

Fire Island National Seashore

This shrubland occurs on the leeward side of primary dunes and receives overwash only during storm surge.

Globally

This maritime shrubland usually occupies the intermediate areas between the very unstable oceanward portions of the dunes and the more protected backdunes. The substrate is sand with little to no soil profile development, and with variable amounts of accumulated leaf litter. The vegetation is subject to wind, salt-spray and sand deposition.

MOST ABUNDANT SPECIES:

Fire Island National Seashore

| <u>Stratum</u> | <u>Species</u> |
|----------------|--|
| Shrub | <i>Prunus maritima</i> , <i>Myrica pensylvanica</i> |
| Herbaceous | <i>Panicum virgatum</i> , <i>Ammophila breviligulata</i> |
| Vine / liana | <i>Toxicodendron radicans</i> |

Globally

| <u>Stratum</u> | <u>Species</u> |
|----------------|--|
| Shrub | <i>Myrica pensylvanica</i> , <i>Rosa rugosa</i> |
| Vine / liana | <i>Toxicodendron radicans</i> , <i>Smilax</i> spp. |

CHARACTERISTIC SPECIES:

Fire Island National Seashore

Prunus maritima, *Myrica pensylvanica*

Globally

Myrica pensylvanica, *Rosa rugosa*, *Ammophila breviligulata*

USGS-NPS Vegetation Mapping Program
Fire Island National Seashore

VEGETATION DESCRIPTION:

Fire Island National Seashore

This maritime dune shrubland is dominated by *Prunus maritima* and *Myrica pensylvanica* with *Rosa rugosa* common, but with low percent cover. Overall shrub cover ranges from 55-90% cover. *Toxicodendron radicans* is a common vine. The herbaceous layer is often sparse and composed of *Ammophila breviligulata*. Other herbaceous species that occur at low cover include *Panicum columbianum*, *Juncus greenii*, *Euthamia tenuifolia*, *Carex silicea*, *Polygonella articulata*, *Gnaphalium obtusifolium*, *Cyperus grayi*, *Antennaria plantaginifolia*, *Lechea maritima*, *Linaria canadensis*, and *Panicum sphaerocarpon*. In more sheltered areas, species composition is more variable with *Pinus rigida* and *Rubus hispidus* prominent in the shrub layer and *Panicum virgatum* dominant in the herbaceous layer. *Cladonia* species are abundant in the non-vascular layer.

Globally

This maritime dune shrubland of the North Atlantic Coast ecoregion is dominated by *Myrica pensylvanica*, *Rosa rugosa* and/or *Prunus maritima*. Although *Rosa rugosa* is not a native species, it is naturalized and is nearly restricted to this vegetation where it grows in similar habit and physiognomy as the other two shrubs characteristic of this vegetation. Typical vine associates are *Toxicodendron radicans* and *Smilax* spp. Herbaceous cover tends to be low, particularly where shrub growth is dense, and may include *Ammophila breviligulata*, *Solidago sempervirens*, *Hudsonia tomentosa*, *Lechea maritima*, *Rumex acetosella*, and others. Large patches of open unvegetated or sparsely vegetated sand are present in some examples. Depending on exposure, these shrublands range from over 2 m tall in sheltered areas to less than 1 m tall in areas with greater exposure to winds and storms.

COMMENTS:

Fire Island National Seashore

Globally

States/Provinces:

CT:S?, DE:S?, MA:S?, ME:S?, NH:S?, NJ:S?, NY:S?, RI:S?

OTHER NOTEWORTHY SPECIES:

CONSERVATION RANK:

G4

DATABASE CODE:

CEGL006295

MAP UNITS:

FIIS plots 13, 33, 46

REFERENCES:

Conard 1935
Dunlop and Crow 1985
McDonnell 1979
Moul 1969
Nichols 1920
Nelson and Fink 1980