

III.B.2.N.a.300. PRUNUS SEROTINA - AMELANCHIER CANADENSIS - QUERCUS SPP. SHRUBLAND ALLIANCE

Black Cherry - Canada Serviceberry - Oak species 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 PRUNUS SEROTINA - AMELANCHIER CANADENSIS - QUERCUS SPP. SHRUBLAND ALLIANCE (III.B.2.N.a.300)

Prunus serotina - Sassafras albidum - Amelanchier canadensis / Smilax rotundifolia
Shrubland

Black Cherry - Sassafras - Canada Serviceberry / Common Greenbrier Shrubland
Northern Deciduous Maritime Scrub Forest

CLASSIFICATION CONFIDENCE LEVEL: 2

USFS WETLAND SYSTEM:

RANGE:

Fire Island National Seashore

This association occurs in patches in the interior of Fire Island.

Globally

The range of this community is coastal areas from southern New Hampshire to New Jersey..

ENVIRONMENTAL SETTING:

Fire Island National Seashore

This maritime tall shrubland occurs behind primary dunes and is influenced by salt spray and wind-pruning. Soils include loamy sand over sand. There is often ridge and hollow microtopography and trees tend to occur in hollows and shrubs on sandy ridges.

Globally

This maritime tall shrubland community of the North Atlantic Coastal Ecoregion occurs on sheltered backdunes, bluffs, or more interior coastal areas not directly influenced by overwash but affected by salt spray and wind-pruning. Soils are coarse well-drained sand subject to considerable shifting during coastal storms, or till and sand deposits of terminal moraines.

MOST ABUNDANT SPECIES:

Fire Island National Seashore

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Amelanchier canadensis, Sassafras albidum, Prunus serotina</i>
Shrub	<i>Amelanchier canadensis, Vaccinium corymbosum, Myrica penslyvanica</i>
Vine / liana	<i>Smilax glauca, Smilax rotundifolia</i>

Globally

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Amelanchier canadensis, Sassafras albidum, Prunus serotina</i>
Shrub	<i>melanchier canadensis, Prunus serotina, Quercus velutina and/or Sassafrasidum</i>
Vine / liana	<i>Parthenocissus quinquefolia, Toxicodendron radicans, Smilax rotundifolia, Smilax glauca, and/or Vitis spp.</i>

CHARACTERISTIC SPECIES:

Fire Island National Seashore

Amelanchier canadensis, Prunus serotina

Globally

Amelanchier canadensis, Prunus serotina, Sassafras albidum, Smilax spp., Vitis spp.

USGS-NPS Vegetation Mapping Program
Fire Island National Seashore

VEGETATION DESCRIPTION:

Fire Island National Seashore

This maritime tall shrubland occurs behind primary dunes and is variable in physiognomy. When present, tree canopy is fairly closed and includes *Amelanchier canadensis* with *Sassafras albidum* or *Prunus serotina* with tree height ranging from 5 to 8 meters. Where prevailing conditions limit overall height, the tall shrub layer is predominant and its canopy tends to be very dense. The top layer, either tree canopy or tall shrub, is sculpted by wind and salt spray. Species in the tall shrub layer include *Amelanchier canadensis*, *Vaccinium corymbosum*, *Myrica pensylvanica*, and *Prunus serotina*. A short shrub layer is often present with *Gaylussaccia baccata* and *Myrica pensylvanica*. Vines are generally found in the top layer with *Smilax glauca* and *S. rotundifolia* most abundant. The herbaceous layer is very sparse to absent. Dowhan and Rozsa (1989) list *Carex pensylvanica*, *Quercus stellata*, and *Viburnum dentatum* as common or frequent associates of the mesic forest, which is likely to be synonymous with this vegetation. They also list the following as rare or occasional within the mesic forest: *Geranium robertianum*, *Mitchella repens*, *Galium aparine*, *Athyrium filix-femina*, *Dryopteris intermedia*, *Vitis aestivalis*, *Vitis labrusca*, *Aralia nudicaulis*, *Chmiaphila umbellata*, *Monotropa uniflora*, *Acer rubrum*, and *Trientalis borealis*. The authors also refer to “mesic tall thickets” which may be classified within this association, and additional frequent associates include *Maianthemum canadense*, *Polygonum biflorum*, *Smilacina stellata*, with *Polygonum scandens*, *Melampyrum lineare*, *Rhus copallina*, and *Ilex glabra* occurring less commonly.

Globally

This maritime tall shrubland community of the North Atlantic Coastal Ecoregion occurs on sheltered backdunes, bluffs, or more interior coastal areas not directly influenced by overwash but affected by salt spray and wind-pruning. Physiognomy is variable, and ranges from closed-canopy forest to open woodland to dense tall shrubland, and may be more accurately called scrub. Trees found in this community are usually stunted and flat-topped; the canopy may be only 3 m to 7 m tall. Dominant trees vary locally and include *Sassafras albidum*, *Amelanchier canadensis*, *Quercus velutina* and *Prunus serotina* as relatively constant species, with admixtures of *Pinus rigida*, *Juniperus virginiana* and in southern occurrences *Quercus coccinea* and *Ilex opaca*. Additional shrub species may also contribute substantially to the canopy and include *Vaccinium corymbosum*, *Gaylussacia baccata*, *Aronia* spp., *Viburnum* spp., *Rosa* spp., and *Myrica pensylvanica*. A true shrub layer is generally not present or may be restricted to the edges of the occurrence. Any one of the tree species listed may be dominant in any given patch. The understory is dominated by vines such as *Parthenocissus quinquefolia*, *Toxicodendron radicans*, *Smilax rotundifolia*, *Smilax glauca*, and *Vitis* spp. probably reflecting the unstable quality of the substrate. Other herbaceous species include *Aralia nudicaulis* and *Maianthemum stellatum* (= *Smilacina stellata*).

COMMENTS:

Fire Island National Seashore

Globally

States/Provinces:

CT:S?, MA:S?, NH:S1, NJ:S?, NY:S?, RI:S?

OTHER NOTEWORTHY SPECIES:

CONSERVATION RANK:

G2G3 (97-10-22)

DATABASE CODE:

CEGL006145

MAP UNITS:

FIIS plots 1, 32, 39, 44

REFERENCES:

Art 1987

Bellis 1992

Breden 1989

Burk 1968

Dowhan and Rozsa 1989

Dunlop and Crow 1985

Greller 1977

Martin 1959b

McDonnell 1979

Reschke 1990

Stalter 1979

Svenson 1970