

LIST OF DUNE VEGETATION

Adapted vegetation is an integral part of the overall dune system that is vital to the protection to the Borough from coastal storms. This vegetation not only aids sand deposition and accumulation, but also serves to retain the sand in the dune system. Accordingly, the selection of plants that will survive and flourish in the harsh environment of the dune system is critical. The Borough of Avalon dune system is a diverse ecosystem exposed to wind and salt spray. The dune soils are sandy; and as such are droughty. In recognition of these conditions, the following vegetation list has been divided into three main categories based upon exposure and soil moisture conditions: (A) Salt Spray Tolerant Vegetation, (B) Sheltered Upland Dune Vegetation and (C) Sheltered Wetland Dune Vegetation based on the species tolerance of conditions and location in the dune system. The criteria for selection of the following plants for dune re-vegetation with native species include: (1) adaptation to survival in the dune environment; (2) resistance to disease and pests; (3) drought hardiness after they are established; (4) ability to be pruned to control shape and height, if trimming is begun early in the tree/shrub development, and (5) availability from nurseries.

The following information has been provided through literature review, direct dune observations in natural areas of coastal barrier island communities and Island Beach State Park, in addition to personal experience and communications with other qualified professionals in the field. One asterisk (*) indicates that this species is used by wildlife for food (including pollinators) and cover. Two asterisks (**) indicates that the plant has high wildlife value. (E) indicates that the plant is evergreen.

A. Salt Spray Tolerant Vegetation

1. Trees:

Common Name
Eastern red cedar *(E)
Black cherry **
Winged sumac **
Smooth sumac **

Scientific Name
Juniperus virginiana
Prunus serotina
Rhus copallinum
R. glabra

2. Shrubs:

Common Name
Northern bayberry **(E)
Wax myrtle *

Scientific Name Morella pensylvanica M. cerifera

Salt Spray Tolerant Vegetation (continued)

Beach plum * Groundsel * Bearberry (E) Beach-heather (E)

Prunus maritima Baccharis halimifolia Arctostaphylos uva-ursi Hudsonia tomentosa

3. Vines:

Common Name

Virginia creeper **

Scientific Name

Parthenocissus quinquefolia

4. Herbaceous:

Common Name

American beachgrass

Sea rocket

Seaside spurge

Coastal panicgrass *

Seaside goldenrod Beach pea * **Dusty miller** Rough cocklebur

Prickly pear (cactus)*(E)

Scientific Name

Ammophila breviligulata

Cakile edentula

Euphorbia polygonifolia

Panicum amarum var. amarulum

Solidago sempervirens Lathyrus japonicus Artemisia stelleriana Xanthium strumarium Opuntia humifusa

В. **Sheltered Upland Dune Vegetation**

1. Trees:

> Common Name Pitch pine **(E)

Eastern red cedar *(E)

Sassafras ** Hackberry **

American holly *(E)

Scarlet oak ** Black oak ** Blackjack oak ** Scrub oak ** Pignut hickory * Mockernut hickory * Hop-hornbeam * Winged sumac ** Smooth sumac **

Persimmon **

Scientific Name

Pinus rigida

Juniperus virginiana Sassafras albidum Celtis occidentalis

llex opaca

Quercus coccinea

Q. velutina Q. marilandica Q. ilicifolia Carya glabra C. tomentosa Ostrya virginiana Rhus copallinum

R. glabra

Diospyros virginiana

2. Shrubs:

Common Name

Northern bayberry **(E)

Wax myrtle * Beach plum * Groundsel * Inkberry holly **(E)

Low rose ** Sweet fern * Scientific Name

Morella pensylvanica

M. cerifera Prunus maritime Baccharis halimifolia

Ilex glabra Rosa carolina

Comptonia peregrina

Sheltered Upland Dune Vegetation (continued)

3. Vines:

Common NameScientific NameClimbing bittersweet *Celastrus scandensTrumpet vine *Campsis radicans

4. Herbaceous:

<u>Common Name</u>
Bitter panicgrass *

<u>Scientific Name</u>

Panicum amarum

Coastal panicgrass * Panicum amarum var. amarulum

Saltmeadow cordgrass Spartina patens
Switchgrass ** Panicum virgatum

Bluestem Schizachyrium scoparium Seaside goldenrod Solidago sempervirens Beach pea * Lathyrus japonicus Partridge pea * Chamaecrista fasciculata Rough cocklebur Xanthium strumarium Dusty miller Artemisia stelleriana Prickly pear * (E) Opuntia humifusa Spanish bayonet * (E) Yucca filamentosa Yarrow *

Yarrow * Achillea millefolium
Butterfly Milkweed ** Asclepias tuberose

C. Sheltered Wetland Dune Vegetation (Interdunal Swales)

1. Trees:

Common NameScientific NameRed maple *Acer rubrum

Serviceberry * Amelanchier arborea
Shadhush * A canadansis

Shadbush * A. canadensis
Southern red oak * Quercus falcata
Willow oak * Q. phellos
Black gum * Nyssa sylvatica
Sweetbay *(E) Magnolia virginiana
Atlantic white cedar (E) Chamaecyparis thyoides

2. Shrubs:

Common NameScientific NameMaleberry *Lyonia ligustrinaBlack chokeberry *Photinia melanocarpa

Red chokeberry * P. pyrifolia Inkberry **(E) Ilex glabra

Southern arrowwood **

Sweet pepperbush *

Black huckleberry **

Gaylussacia baccata

Winter bears **

Winterberry ** Ilex verticillata

Highbush blueberry ** Vaccinium corymbosum

Sheltered Wetland Dune Vegetation (Interdunal Swales) (continued)

3. Herbaceous:

Common NameScientific NameSaltmeadow cordgrassSpartina patensSwitchgrass**Panicum virgatumSpike grassDistichlis spicataSaltmeadow rushJuncus gerardiiSalt-marsh bulrushScirpus robustusCommon threesquareS. pungens

Source: Courtesy of The Lomax Consulting Group

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Last updated May 29, 2014