# **CONNECTICUT COASTAL PLANTING GUIDE**

Juliana Barrett Connecticut Sea Grant, University of Connecticut juliana.barrett@uconn.edu



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This guide will be a useful tool for those interested in native landscaping within Connecticut's coastal region. It contains a list of plants that will grow well along Long Island Sound and several miles inland. Connecticut's coastal zone is defined here as the coastal ecoregion of Dowhan and Craig (1976) (Figure 1). An ecoregion is an area of similar landforms, climate, and biota. This region, divided below into eastern and western coastal ecoregions (V-A and V-B), extends 5 to 7 miles inland and has a long frost-free season (average approximately 180 days in the west, and 195 days in the east). Within this region, there are a wide variety of habitats and growing conditions, including tidal marshes and coastal forests, soils ranging from fine silts to sandy or rocky soils, and soil moisture conditions ranging from wet or moist to very dry. Vegetation in a particular area depends on a complex suite of site characteristics including geology and soils, local climate, topography, land use history and biotic factors. So the plants found growing in one location may be very different from those found one or two miles away.

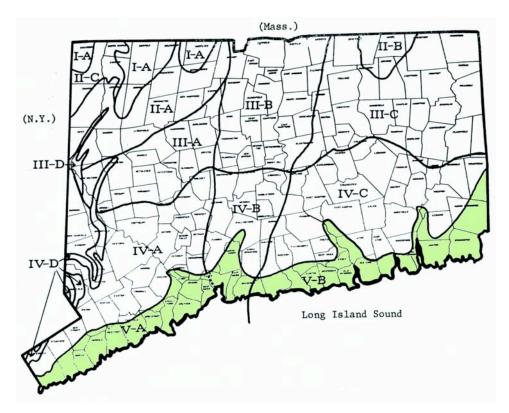


Figure 1. Ecoregions of Connecticut (from Dowhan, J. and R. Craig. 1976. Rare and endangered species of Connecticut and their habitats. Hartford, CT: Connecticut Geological and Natural History Survey. p. 135. Plants are categorized in the following list by growth form: tree, shrub, herbaceous perennial, or vine. For each species, information is provided on general plant characteristics such as average height, growth conditions (light and soil conditions), and salinity tolerance in terms of soil salinity and salt spray tolerance. In some cases, information is provided on negative aspects of a plant, such as whether or not it is poisonous to humans. This information on plant toxicity is included only as space permits and so should not be considered a definitive guide.

Salts from both Long Island Sound waters and pavement de-icing materials can pose challenges to those landscaping in coastal Connecticut. Salts can impact plants in the form of salt spray or can accumulate in soils. Salt spray can damage leaves and plant tissue: high soil salt concentrations can damage plant tissue and interfere with water uptake. Either can ultimately cause plant death. This publication indicates salt tolerance for the listed species both in the form of salt spray and soil salt tolerance. For some species, the data are clearly consistent and species are indicated as being salt tolerant. For some species, however, depending on how salt tolerance studies were conducted, there may be differences in the results. In these situations, the tolerance is indicated as "Some references indicate tolerance." Users of this guide know their localized landscaping area best. Information from local nurseries, taking note of which native species live and thrive nearby, combined with information offered here, may be the best guide in determining salinity tolerance for specific locations and conditions. In addition, there are cultivars and varieties of species available at local nurseries which may have higher salinity tolerances than those listed.

Plants that were not included on this list are nonnative or invasive species, certain native species that are particularly susceptible to disease or wind damage, and native plants listed by the state as endangered, threatened or of special concern. Native/Naturalized status for each species was determined using the USDA Plants Database, and a plant is considered "native" if it has been determined to occur naturally within Connecticut's political boundaries.

There are many other plants and horticultural varieties that you may want to use in landscaping and that are much easier to find in local nurseries than those listed here. **This list is meant to be a starting place** where you can begin thinking about the growing conditions on your property such as soil type and exposure to salt, and the mix of desired growth forms (trees, shrubs, herbaceous perennials). For example, one can create a windbreak with salt spray tolerant trees and shrubs, and behind it, plant favorite landscape plants and annuals that may have little if any salt tolerance.

Within Connecticut, any area below mean high water is directly subject to state regulation under the Connecticut Coastal Management Act. Any work or planting in or near a tidal wetland or watercourse, or within the Coastal Zone, may require a state permit. In addition, inland wetlands and watercourses are regulated by town inland wetlands commissions. In fact, even removal of invasive species from a wetland may require commission approval. For further information contact either your town Inland Wetland Commission or Connecticut Department of Environmental Protection

Connecticut Dept. of Environmental Protection Office of Long Island Sound Programs Bureau of Water Protection and Land Reuse 79 Elm Street Hartford, CT 06106-5127 (860) 424-3034

#### References used to obtain information on plant characteristics, growing conditions and salinity tolerances:

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## **NATIVE TREES for Coastal Connecticut**

NAME	CHARACTERISTICS	SALINITY TOLERANCE		GROWTH CONDITIONS
		Spray	Soil	
Acer rubrum Red maple	Deciduous; height 12 – 21.3 m (40 – 70+ft); rapid growing, red fall foliage; subject to storm damage	None	None	Light: Partial shade to full sun Soil: Grows best in moist, acidic conditions, but very adaptable
<i>Amelanchier</i> <i>arborea</i> Common serviceberry	Deciduous, multi-stemmed shrub or small tree; height to 10 m (33 ft); white flowers in early spring, red fall foliage	Some references indicate tolerance	None	Light :Shade to full sun Soil: Moist acidic soil Can grow in a variety of habitats: forest edges, dry wood, rocky and sandy bluffs, swampy lowlands
<i>Amelanchier</i> <i>laevis</i> Allegheny serviceberry	Deciduous, small tree with multiple trunks; height 4.6 – 7.6 m (15-25 ft); white flowers in spring	Yes	Yes	Light: Shade to full sun Soil: Moist to moderately dry soils; grows in cool, rich, woods, moist to drier thickets, swamp margins, Prefers wetter sites; drought sensitive
<i>Betula nigra</i> River birch	Deciduous, multi-trunked with peeling bark; height to 21 m (70 ft); medium to rapid growth rate	None	None	Light: Partial shade to full sun; shade intolerant Soil: Sandy/loamy, moist soils; can tolerate periodic flooding; commonly grows in riparian areas
<b>Betula</b> <b>populifolia</b> Gray birch	Deciduous, small, bushy tree with white, non-peeling bark. Height to 15 m (49 ft); Fast growing but short lived	Some references indicate tolerance	None	Light: Partial shade to full sun Soil: wet to dry, poor soils often excessively drained soils; cannot withstand long periods of inundation
<i>Celtis</i> <i>occidentalis</i> Common Hackberry	Deciduous; height 15–21 m (50-70 ft); oval lance-shaped leaves; Fruits have high wildlife value	None	None	Light: Shade to full sun Soil: Prefers rich soil, but is very adaptable; Can grow along stream banks or flood plains

NAME	CHARACTERISTICS	SALINITY TOLERANCE		GROWTH CONDITIONS
		Spray	Soil	
<i>Cornus</i> <i>alternifolia</i> Pagoda dogwood	Deciduous; height to 7.6 m (25 ft); clusters of small, white flowers in mid to late spring; red/purple berries	Some references indicate tolerance	None	Light: Shade to partial shade Soil: Moist, well-drained, acidic soils Susceptible to wind and ice damage; tolerant of poor soils
<i>Cornus florida</i> Flowering Dogwood	Deciduous; height 6 - 9 m (20-30 ft); showy spring flowers, red fruit, red fall foliage; susceptible to anthracnose	None	None	Light: Shade to partial shade Soil: Rich well-drained, acidic soils
<i>Crataegus crus- galli</i> Cockspur hawthorn	Deciduous; height 6 - 11 m (20-35 ft); exfoliating bark, horizontal branching, red fall foliage, thorns	Tolerant	None	Light: Partial shade to full sun Soil: variable, prefers moist, well-drained soils
<i>Fraxinus</i> <i>americana</i> White ash	Deciduous; height 20 – 30 m (66-98 ft); Often planted in large, open areas as a shade tree; medium growth rate	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun; prefers full sun Soil: Rich, moist, well-drained soils, well drained stream banks; tolerant of poorly drained soils
<i>Fraxinus</i> <i>pennsylvanica</i> Green ash	Deciduous; Height approx 15m (49 ft); Once established, very hardy to climatic extremes	Some references indicate tolerance	None	Light: Partial shade to full sun Soil: Adaptable, prefers fertile, well drained loamy soils; will tolerate seasonal flooding; intolerant of shading
<i>Ilex opaca</i> American holly	Evergreen; height 4.6 - 6 m (15–20 ft) but can be more; bright red berries on female plants; very slow growing; need male and female plants to produce fruits; fruits are poisonous	Some references indicate low tolerance	Some references indicate low tolerance	Light: Partial shade to full sun Soil: Moist, well-drained sandy/loamy soils; will tolerate somewhat poorly drained soils
<i>Juglans nigra</i> Black walnut	Deciduous; height 15 - 21 m (50-70 ft) or more; Fruits (nuts) can be messy; susceptible to anthracnose; slow growing	Some references indicate tolerance	Some references indicate tolerance	Light: Full sun Soil: needs fertile, moist soil, grows well in riparian areas

NAME	CHARACTERISTICS	SALINITY TOLERANCE	2	GROWTH CONDITIONS
		Spray	Soil	
<i>Juniperus</i> <i>virginiana</i> Eastern red cedar	Evergreen; height generally 3 - 12 m (10-40 ft); slow growth rate	Tolerates some salt spray	Low salinity tolerance	Light: Partial shade to full sun Soil: found on a variety of soil types from dry, acidic, sandy soils; to dry limestone based soils
<i>Liriodendron</i> <i>tulipifera</i> Tulip poplar	Deciduous; rapid growing; height 24 -37 m (80 - 120 ft); tulip shaped green -yellow flowers	None	Low tolerance	Light: Partial shade to full sun Soil moist, deep, well-drained soils
<i>Nyssa sylvatica</i> Blackgum	Deciduous, medium tree; height 9 - 15 m (30 - 50 ft) with a 6 - 9 m (20 - 30 ft) spread; red fall foliage; slow growth rate	Some references indicate tolerance	Low	Light: Partial shade to full sun Soils: prefers moist, well-drained acidic soils; will tolerate poor drainage
<b>Pinus rigida</b> Pitch pine	Evergreen; height to 18 m (60 ft); a three needle species, medium growth rate	Some references indicate tolerance	Some references indicate tolerance	Light: Requires full sun Soil: Dry, gravelly or sandy soil; Intolerant of competition from other plants
Platanus occidentalis Sycamore	Deciduous; height to 30 m (100 ft); fast growing, susceptible to wind and ice damage	Some references indicate low tolerance	None	Light: Partial shade to full sun Soil: prefers moist, sandy or silty soils; can withstand extended flooding; drought tolerant
<b>Prunus</b> virginiana Chokecherry	Deciduous, small tree; height 6-9 m (20– 30 ft); often forms thickets; parts of plant are toxic	Tolerates salt spray	None	Light: Shade to full sun Soil: prefers rich, moist soils, but will grow under a wide variety of soil types
<b>Prunus serotina</b> Black cherry	Deciduous, height 18-24 m (60-90 ft); rapid growth, fragrant white flowers	Some references indicate tolerance	None	Light: Sun to partial shade Soil: prefers moist well-drained soils; drought tolerant; common in CT's coastal forests
<i>Ptelea trifoliata</i> Common hoptree	Deciduous, small tree; height to 6 m (20 ft)	None	None	Light: Partial shade to full sun Soil: Moist to dry well-drained loams (prefers moist soil) Good for both moist conditions and dry, rocky sites

Quercus alba White oak	Deciduous; height to 30 m (100 ft); long lived shade tree	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: prefers moist well-drained loams and sand
<b>Quercus bicolor</b> Swamp white oak	Deciduous; height 15 - 18 m (50 - 60 ft); moderate growth rate, leaves have whitish green undersides	None	None	Light: Partial shade to full sun Soil: prefers moist to wet acidic soil; drought tolerant
<i>Quercus</i> <i>palustris</i> Pin oak	Deciduous tree, height 21 - 27 m (70 -90 ft); fast growing oak, strongly pyramidal shape, red fall foliage	None	None	Light: Partial shade to sun Soil: Wet, poorly drained soils
<i>Quercus prinus</i> Chestnut oak	Deciduous tree, height 18 - 21 m (60 -70 ft); moderate growth rate	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade Soil: often found on sandy, rocky or gravelly, dry soils; will grow well on well-drained lowland sites
<i>Quercus rubra</i> Northern red oak	Deciduous, large tree; height 23 m (75 ft) +; can tolerate urban conditions	None	Some references indicate tolerance	Light: Partial shade to full sun Soil: prefers well drained, acidic sandy loams; adaptable to poorly drained or dry soils
<i>Quercus stellata</i> Post oak	Deciduous, height 12 - 15 m (40 - 50 ft); slow growing	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade Soil: Dry to moist rocky or sandy soils
<i>Quercus velutina</i> Black oak	Deciduous, medium sized tree; height 15 - 18 m (50 - 60 ft), moderate growth rate	Low	Some references indicate tolerance	Light: Partial shade to sun Soil: dry, sandy to moist, rich, well-drained, acidic soil
<b>Sassafras</b> albidum Sassafras	Deciduous; height to 18 m (59 ft); slender, pyramidal shape, with bright yellow/orange foliage in the fall; A common tree of CT's coastal forests	Some references indicate tolerance	Some references indicate tolerance)	Light: Partial shade to full sun Soil: Prefers moist well-drained soil, but adaptable High drought tolerance
<i>Tilia americana</i> Basswood	Deciduous; height 15 - 21 m (50 - 70 ft); medium to fast growing; flowers favored by bees	None	None	Light: Partial sun to full sun Soil: Moist well-drained, loamy soils

# **NATIVE SHRUBS for Coastal Connecticut**

NAME	CHARACTERISTICS	SALINITY TOLERANCE		GROWTH CONDITIONS
		Spray	Soil	
Alnus incana ssp rugosa Speckled alder	Deciduous; Height : can reach 9m (30 ft) but often smaller; thicket forming, fast growing	Some references indicate tolerance	Some references indicate tolerance	Light: Shade to partial shade to full sun Soils: moist soils, wide range of soil types, can tolerate occasional flooding and drought; often found growing in riparian areas.
<i>Alnus serrulata</i> Smooth alder	Deciduous; Height: approx 3.7 m (12 ft) or more; thicket forming	Some references indicate tolerance	None	Light: Partial shade to full sun Soils: moist to wet soils; flood tolerant, often found in riparian areas, but will grow in well-drained uplands; Susceptible to wind and ice damage
<i>Amelanchier</i> <i>canadensis</i> Canadian serviceberry	Deciduous; Height: 1.8 – 6m (6 – 20 ft), multi- trunked; red fruits and orange to red fall foliage	Some references indicate tolerance	Medium tolerance	Light: Shade to partial shade to full sun Soils: moist, well-drained soils; subject to many diseases and insect problems which usually cause only cosmetic damage
<i>Amelanchier</i> <i>stolonifera</i> Running serviceberry	Deciduous: Height: 1.2 - 1.8 m (4- 6 ft), clump forming	Some references indicate tolerance	Some references indicate tolerance	Light: Shade to partial shade to full sun Soils: Moist to dry soils
Arctostaphylos uva-ursi Red bearberry	Evergreen; Height: 0.15 - 0.3 m (0.5 – 1 ft); ground trailing shrub with wide spread; slow growing	Tolerant	Tolerant	Light: Shade to partial shade to full sun Soils: rocky or sandy acidic soils Highly drought tolerant
Baccharis halimifolia Groundsel bush	Deciduous; Height: up to 3 m (10 ft); female plants have showy, cotton-like white flower clusters; fast growing	Tolerant	Tolerant	Light: Partial shade to full sun Soils: wet to dry soils often along borders of salt and brackish tidal marshes or in backdune areas

<i>Ceanothus</i> <i>americanus</i> New Jersey Tea	Deciduous: Height: to 0.9 m (3 ft) tall, white flowers	None	None	Light: Shade to partial shade Soils: well-drained sand or loam, limey soils; drought tolerant
<i>Cephalanthus</i> <i>occidentalis</i> Common buttonbush	Deciduous; Height: 0.9 – 3 m (3-10 ft) tall; Fruits are 2.5 cm (1 in) round ball-like cluster	None	Some references indicate low tolerance	Light: Partial shade to full sun Soil: wet soils; sandy and clay loams
<i>Clethra alnifolia</i> Coastal sweet pepperbush	Deciduous; Height up to 3 m (10 ft) tall; Spikes of fragrant white flowers bloom in late summer	Tolerant	Some references indicate tolerance	Light: Partial shade to full sun. Soil: Wet to moist soils
<i>Comptonia</i> <i>peregrine</i> Sweetfern	Deciduous; Height 0.6 – 1.2 m (2 - 4 ft); member of the bayberry family; leaves aromatic when crushed; multiple stems	Some reference indicate tolerance	Some references indicate tolerance	Light: Partial shade Soil: sandy, acidic soils
<i>Cornus amomum</i> Silky dogwood	Deciduous: Height $1.8 - 3 \text{ m} (6 - 10 \text{ ft})$ ; small white flowers with blue fruits	Some references indicate tolerance	None	Light: Shade to partial shade Soil: wet to moist, clay. loamy and sandy soils; not drought tolerant; found in riparian areas/seasonal wetlands, fields
<i>Cornus racemosa</i> Gray dogwood	Deciduous; Height: 3 – 4.6 m (10 – 15 ft) tall; small, greenish white flowers	Some references indicate tolerance	Some references indicate tolerance	Light: Shade to partial shade to full sun Soil: prefers moist soils, but highly adaptable
<i>Cornus sericea</i> Redosier dogwood	Deciduous; Height:1.8 – 3.7 m (6 – 12 ft) tall; multi-stemmed with red branches	Some references indicate tolerance	None	Light: Partial shade Soil: moist, well-drained soils
<i>Eubotrys racemosa</i> Swamp doghobble	Deciduous; Height: $1.2 - 1.8 \text{ m} (4 - 6 \text{ ft}) \text{ tall};$ thicket forming; red fall foliage	None	Some references indicate low tolerance	Light: Partial shade Soil: wet to moist, sandy acidic soils; Riparian areas
<i>Gaultheria</i> <i>procumbens</i> Wintergreen	Evergreen; Height: $0.05$ - $0.15$ m (2 - 6 in). Forms small colonies	None	None	Light: Partial shade to shade Soil: moist to dry, variable soil types

<i>Gaylussacia</i> <i>baccata</i> Black huckleberry	Deciduous; Height: $0.3$ - $0.6 \text{ m} (1 - 2 \text{ ft}) \text{ tall};$ colony forming shrub; red fall foliage	None	None	Light: Shade to partial shade to sun Soil: Wet to moist to dry, sandy or rocky, acidic soils; good ground cover for thin, rocky soils
<i>Gaylussacia</i> <i>frondosa</i> Blue huckleberry	Deciduous in CT; Height: 0.5 – 0.9 m (1.5 – 3 ft); blue fruits	None	None	Light: Partial shade Soil: well-drained soils; often on acidic, poor soils; often found in dry to wet woods and thickets and swamp margins; high drought tolerance
Hamamelis virginiana Common witchhazel	Deciduous; Height: 3 – 4.6 m (10 – 15 ft); multi-trunked; fall flowering with yellow flowers	Some references indicate tolerance	None	Light: Shade to partial shade to full sun Soil: Prefers rich, well drained soils
<i>Ilex verticillata</i> Common winterberry	Deciduous; Height: Up to 3 m (10 ft); fruits are bright red; need male and female plants to produce fruits	Some references indicate tolerance	Some references indicate tolerance	Light: Full sun to partial shade Soil: Moist, acidic soils; tolerant of poor drainage Fruits are poisonous
<i>Iva frutescens</i> High tide bush, marsh elder	Deciduous; Height: 0.6 - 1.8 m (2 - 6 ft), bushy, small, inconspicuous flowers	Tolerant	Tolerant	Light: Full sun Soil: Moist to wet saline soils, upland marsh border
<i>Juniperus</i> <i>communis</i> Common juniper	Evergreen; Height: 1.5 – 3 m (5 – 10 ft); slow growth rate	Some references indicate tolerance	Medium tolerance	Light: Full sun Soil: sandy, dry soils; Shade intolerant; high drought tolerance
<i>Juniperus</i> <i>horizontalis</i> Creeping juniper	Evergreen; Height: to 0.9 m (3 ft) but forms a horizontal mat to 20 ft	Low	Some references indicate tolerance	Light: Partial shade to full sun Soil: dry, rocky soils; intolerant of shade and poor drainage
<i>Kalmia</i> <i>angustifolia</i> Sheep laurel	Evergreen; Height: to 0.9 m (3 ft) forming a horizontal mat; pink flowers	None	None	Light: Partial shade to full sun Soil: Wet to dry soil Plant parts are poisonous

<i>Kalmia latifolia</i> Mountain laurel	Evergreen; Height: 3.7 – 6 m (12 – 20 ft); thicket forming	None	None	Light: Partial shade Soil: Moist, rocky or sandy soils Plant parts are poisonous
<i>Lindera benzoin</i> Northern spicebush	Deciduous; Height: $1.8 - 3.7 \text{ m} (6 - 12 \text{ ft})$ ; fast growing shrub; yellow flowers followed by red fruits	None	None	Light: Shade to partial shade to full sun Soil: moist, sandy, well-drained soils; Prefers moist, shady areas
<i>Lyonia ligustrina</i> Maleberry	Deciduous; Height:0.9 – 3.7 m (3 to 12 ft); small, white flowers	None	None	Light: Partial shade Soil: Wet, poorly drained acidic soils; often found in riparian areas, and alluvial wetlands
<i>Morella</i> <i>pensylvanica</i> Northern bayberry	Height: 1.5 – 2.4 m (5 – 8 ft); waxy, silver/gray berries; need male and female plants to produce berries	Tolerant	Tolerant	Light: Partial shade to full sun Soil: sandy, clay soils, wide range of growing conditions
<i>Myrica gale</i> Sweet gale	Deciduous; Height: 0.6 - 1.2 m (2 - 4 ft); sweet scented leaves)	Some references indicate tolerance	None	Light: Shade to partial shade to full sun Soil: Wet to moist soil
<i>Photinia</i> <i>floribunda</i> Purple chokeberry	Deciduous; Height to 3.7 m (12 ft); white, showy flowers	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: wide range of soil types: clay, loam, sand and wet to dry; tolerates seasonal flooding Moderately tolerant of shade and drought; can be found in salt marsh borders
<i>Photinia</i> <i>prunifolia</i> Black chokeberry	Deciduous; Height 0.9 – 1.8 m (3 to 6 ft); multistemmed; small white flowers, purple fruits	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Best in full sun Soil: dry to wet soils, adaptable to a wide variety of conditions
<i>Photinia pyrifolia</i> Red chokeberry	Deciduous; Height: 1.8 – 3 m (6 to 10 ft), multi-stemmed; white flower clusters; red fall foliagel	Tolerant	Low tolerance	Light: Full sun Soil: dry to wet soils; adaptable to a wide variety of conditions

<i>Physocarpus</i> <i>opulifolius</i> Common ninebark	Deciduous; Height: 0.9 – 3 m (3 - 10 ft) whitish pink flowers; exfoliating bark	Some references indicate tolerance	None	Light: Shade to partial shade to full sun Soil: wet, moist or dry clay or loam soils, drought tolerant. Grows well in a wide range of light, soil and moisture conditions
<b>Prunus maritima</b> Beach plum	Deciduous; Height:1.8 – 3.7 m (6 - 12 ft); white flowers; fast growing	Tolerant	Low tolerance	Light: Full sun (shade intolerant) Soil: sandy or gravelly soils; sandy soils near the coast
<i>Quercus ilicifolia</i> Bear oak	Deciduous; Height: 3.7 - 6.1 m (12 - 20 ft), much branched	Some references indicate tolerance	Some references indicate tolerance	Light: Full sun Soil: dry sandy or gravelly acidic soils
<b>Quercus prinoides</b> Dwarf Chinkapin Oak	Deciduous; Height: to 7.6 m (25 ft)	Some references indicate tolerance	Some references indicate tolerance	Sun: Shade to partial shade Soil: Dry, sandy/rocky soils
<b>Rhododendron</b> viscosum Swamp azalea	Deciduous; Height: 0.9 - 2.4 m (3-8 ft) tall; white very fragrant flowers	None	None	Light: Partial shade Soil: wet soils; flood tolerant.
<i>Rhus copallinum</i> Winged sumac	Deciduous; Height: to 3 m (10 ft), sometimes taller; thicket forming, leaves reddish purple in fall	Some references indicate tolerance	None	Light: Full sun Soil: dry, rocky often poor soils
<i>Rhus glabra</i> Smooth sumac	Deciduous; Height: 3 – 4.6 m (10 – 15 ft); thicket forming	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: most dry soils; drought tolerant
<i>Rhus typhina</i> Staghorn sumac	Deciduous; Height: 4.6 - 9.1 m (15 - 30 ft); thicket forming	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: dry, gravelly or rocky soils
<b>Rosa carolina</b> Carolina rose	Deciduous; Height: 0.3 - 0.9 m (1 - 3 ft); pink flowers	Tolerant	Tolerant	Light: Partial shade to full sun Soil: moist to dry rocky or sandy well-drained soils

<i>Rosa palustris</i> Swamp rose	Deciduous; Height:1.8 – 2.4 m (6 – 8 ft); dark pink flowers	Some references indicate tolerance	Some references indicate tolerance	Light: Shade to partial shade to full sun Soil: wet, rich soils; found in wet thickets and riparian shorelines
<b>Rosa virginiana</b> Virginia Rose	Deciduous; Height: 0.6 - 1.8 m (2 - 6 ft)	Tolerant	Tolerant	Light: Prefers full sun; will grow in partial shade Soil: well drained acidic soils; found in thickets and meadows
<i>Salix discolor</i> Pussy willow	Deciduous; Height: up to 6 m (20 ft); fast growing/ short lived	None	None	Light: Prefers full sun; shade tolerant Soil: Prefers damp soils;
Sambucus nigra ssp. canadensis American black elderberry	Deciduous; Height: up to 3.7 m (12 ft) tall, white flower clusters, deep purple fruits	None	None	Light: Partial shade to full sun Soil: wet to dry soils; prefers moist, rich soils
<i>Spiraea alba</i> var. <i>latifolia</i> White Meadowsweet	Deciduous; Height: 0.3 - 1.8 m (1 - 6 ft)	Some references indicate tolerance	None	Light: Full sun Soil: moist soils
<i>Spirea tomentosa</i> Steeplebush	Deciduous; Height: 0.6 - 1.8 m (2 - 6 ft)	Some references indicate tolerance	None	Light: Full sun Soil: moist to wet soils; found in wet meadows and riparian areas
Vaccinium angustifolium Lowbush blueberry	Deciduous; Height:0.15 - 0.6 m (0.5 - 2 ft); multiple stemmed	Some references indicate tolerant	Some references indicate tolerance	Light: Partial shade to full sun Soil: best growth on well drained acidic soils
Vaccinium corymbosum Highbush blueberry	Deciduous; Height:1.8 – 3.7 m (6 – 12 ft)	Tolerant	Tolerant	Light: Shade to partial shade to full sun Soil: wet to moist to dry; acidic rocky soil to organic peat
Vaccinium macrocarpon cranberry	Evergreen; Height: less than 0.3 m (1 ft)	None	None	Light: Partial shade Soil: wet to moist, peaty soils

Vaccinium pallidum Blue Ridge blueberry	Deciduous; Height 0.3 – 0.6 m (1 -2 ft); colony forming	None	None	Light: Shade to partial shade to full sun Soil: Moist to dry loamy sands; often found in dry woods
<i>Viburnum</i> <i>dentatum</i> Southern arrowwood	Deciduous; Height 0.9 – 2.7 m (3 – 9 ft); wide clusters of white flowers, dark blue fruits	Tolerant	Tolerant	Light: Partial shade to full sun. Soil: dry to wet soils and sands
Viburnum recognitum Southern arrowwood	Deciduous; Height: 1.5 - 4.6 m (5 - 15 ft); multistemmed, dark blue fruits	Some reference indicate tolerance	Some references indicate tolerance	Light: Partial shade to shade Soil: wet to moist, fertile, loamy soils

## **NATIVE GRASSES/SEDGES/RUSHES for Coastal Connecticut**

NAME	CHARACTERISTICS	SALINITY	TOLERANCE	GROWTH CONDITIONS
		Spray	Soil	
<i>Ammophila</i> <i>breviligulata</i> American Beach Grass	Perennial, erect grass; Height: 0.6-0.9 m (2–3 ft); spreads laterally by rhizomes; continues growth when leaves are covered by sand	Tolerant	Tolerant	Light: Full sun Soil: Dry sand or sandy, coarse textured soils; most common plant of CT's sand dunes; local genotypes should be used; plant dormant culms between Oct15 and April 1
Andropogon gerardii Big bluestem	Perennial, clump forming; height 1.2-2.4 m (4-8 ft); copper fall color	Tolerant	Tolerant	Light: Partial shade to sun. Soil: sandy to clay soils, well drained, drought tolerant once established
Andropogon virginicus Broomsedge bluestem	Perennial, tuft forming grass; height: 0.6-1.2 m (2–4 ft); golden fall color	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soils: low fertility soils, dry, sandy soils; drought tolerant
<i>Carex stricta</i> Upright sedge orTussock sedge	Perennial, slender leaves: Height:0.3-0.9 m (1-3 ft); forms large hummocks up to 0.9 m (3 ft) wide	None	None	Light: Full sun Soil: Wet soil to standing water
<b>Deschampsia</b> <b>flexuosa</b> Wavy hairgrass	Perennial; height: to 0.3 m (1 ft) with 0.3-0.5 m (1-1.5 ft) spread	None	None	Light: Shade to partial shade Soil: Well drained soils; drought tolerant
<b>Distichlis</b> spicata Spikegrass	Perennial, erect and rigid; height: approx 0.3 m (1 ft) tall	Tolerant	Tolerant	Light: Full sun Soil: wet saline or alkaline soils; in CT found in salt and brackish tidal marshes; can adapt to drier soils such as sands, silts and clays

<i>Elymus</i> <i>virginicus</i> Virginia wildrye	Perennial, erect; height: 0.6-1.2 m (2-4 ft)	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: Prefers fertile, loamy soils but will grow in many other soil types; moist conditions
<i>Hierochloe</i> <i>odorata</i> Sweetgrass	Perennial; slender, erect; height: 0.3-0.6 m (1-2 ft)	Tolerant	Tolerant	Light: Full sun Soil: wet soils; moist meadows, fresh/brackish shoreline
<i>Hordeum</i> <i>jubatum</i> Foxtail Barley	Perennial, bunch grass; height: 0.3-0.6 m (1-2 ft)	Tolerant	Tolerant	Light: Full sun Soil: wide range of soil types; poorly drained to dry soils
<i>Juncus effuses</i> Common rush	Grass-like perennial (rush); height: to 1.2 m (4 ft), clump forming, slow spreading	Low	Low	Light: Full sun Soil: clay, loam, sand; fresh to brackish marshes; seasonal wetlands
<i>Juncus gerardii</i> Black rush or Blackgrass	Grass-like perennial (rush); height: $0.25 - 0.5 \text{ m}(10 - 20 \text{ in})$ ; the capsule fruit turns dark brown hence the name "blackgrass"	Tolerant	Tolerant	Light: Full sun Soil: wet soils of salt and brackish marshes, found at higher elevations of the salt marsh
Panicum virgatum Switchgrass	Perennial; height: 0.9 – 1.8 m (3 – 6 ft) grows in large clumps, stem has reddish tint	Tolerant	Some references indicate tolerance	Light: Partial shade to full sun Soil: Dry to moist soils, grows best in sandy to clay loams; can tolerate seasonal poor drainage
<i>Schizachyrium</i> <i>scoparium</i> Little bluestem	Perennial, bunch grass; height: 0.5 - 0.6  m (1.5 - 2  ft) foliage turns from blue-green to copper in the fall	None	None	Light: Partial shade to full sun Soil: Well-drained, medium to dry infertile soils; wide range of soils but not wetlands; drought tolerant
<i>Schoenoplectus</i> <i>robustus</i> Sturdy bulrush	Perennial sedge; height: up to 1 m (3.5ft), stems are triangular in cross-section	Tolerant	Tolerant	Light: Full sun Soil: wide range of wetland soils
<b>Sorghastrum</b> nutans Indiangrass	Perennial, clumped grass; height: 0.9 – 1.5 m (3-5 ft)	Tolerant	Tolerant	Light: Partial sun to full sun Soil: grows best in moist, rich soils; tolerant of poor to excessively well-drained soils; many soil types

Spartina	Perennial grass; height 0.9 – 2 m	Tolerant	Tolerant	Light: Full sun
alterniflora	(3 -7 ft), spreads extensively via			Soil: Sandy to peaty soils; salt/brackish marshes and
Saltmarsh	rhizomes			shorelines
cordgrass				
Spartina	Perennial grass; height: $0.3 - 0.5$	Tolerant	Tolerant	Light: Full sun
patens	m $(1 - 1.5 \text{ ft})$ spreads extensively			Soil: Sandy to peaty soils; salt/brackish marshes;
Saltmeadow	via rhizomes			tolerates irregular tidal inundation
cordgrass				

## NATIVE HERBACEOUS PERENNIALS for Coastal Connecticut

NAME	CHARACTERISTICS	SALINITY TOLERANCE		GROWTH CONDITIONS
		Spray	Soil	
Asclepias tuberosa Butterfly milkweed	Height: $0.5 - 0.6$ m (1.5 - 2 ft); large clusters of orange flowers	None	None	Light: Partial shade to full sun Soil: Prefers well-drained sandy soil; drought tolerant; Parts may be toxic
Baptisia australis Blue wild indigo	Bushy; height: $0.6 - 1.2$ m $(2 - 4 \text{ ft})$ with $0.6 - 0.9 \text{ m} (2-3 \text{ ft})$ spread; blue legume flowers	Some references indicate tolerance	None	Light: Full sun Soil: Gravelly, sandy or well-drained loamy soils; drought tolerant
<i>Baptisia tinctoria</i> False indigo	Bushy; height $0.6 - 0.9$ m $(2 - 3 \text{ ft})$ ; yellow flowers	Some references indicate tolerance	None	Light: Full sun Soil: acidic loams, sand Toxic if ingested
<i>Eupatoriadelphus</i> <i>dubius</i> Coastal plain Joe Pye Weed	Height: 0.6 – 1.5 ft (2 – 5 ft); pale pink flowers	None	None	Light: full sun Soil: sandy, wet soils particularly in marshes and wet meadows
<i>Eupatoriadelphus</i> <i>maculates</i> Spotted trumpetweed	Height: 0.9 – 1.8 m (3 – 6 ft); pale pink flowers	None	None	Light: Partial shade to full sun Soil: various soil types as long as wet to moist conditions
<i>Eupatorium</i> <i>perfoliatum</i> Common Boneset	Height: 0.6 – 1.2 m (2 – 4 ft); white flowers	None	None	Light: Partial shade to full sun Soil: various soil types as long as wet to moist conditions
<i>Eupatorium</i> <i>purpureum</i> Sweet scented Joe pye weed	Height: 0.9 – 2.1 m (3 – 7 ft); pink flowers	Some references indicate tolerance	Some references indicate tolerance	Light: Partial shade to full sun Soil: various soil types with moist to average soils moisture conditions

Hibiscus moscheutos Crimsoneyed rosemallow	Height: 1.2 – 2.1 m (4 – 7 ft); white or pink flowers	Low tolerance	Low tolerance	Light: Partial shade to full sun Soil: brackish marsh soils
<i>Iris versicolor</i> Harlequin blueflag	Height: 0.3 – 0.9 m (1 – 3 ft); blue to purple flowers	None	Some references indicate moderate brackish water tolerance	Light: Partial shade to full sun Soil: Moist, rich soils; can tolerate inundation
<i>Limonium carolinianum</i> Sea Lavendar	Height: 0.3 – 0.6 m (1 – 2 ft); pale purple flowers	Tolerant	Tolerant	Light: Partial shade to full sun Soil: wet soils; common in salt marshes, and tidal shorelines
<i>Lobelia cardinalis</i> Cardinal flower	Height: $0.3 - 1.2 \text{ m} (1 - 4 \text{ ft})$ ; bright red flowers	None	None	Light: Shade to partial shade to full sun Soil: wet to moist soils; riparian areas Poisonous parts
<i>Lobelia siphilitica</i> Great blue lobelia	Height: 0.6 – 0.9 m (2 – 3 ft); blue flowers	None	None	Light: Shade to partial shade to full sun Soil: wet to moist clay, loamy to sandy soils Poisonous parts
<i>Lupinus perennis</i> Sundial lupine	Height: 0.3 – 0.9 m (1 – 3 ft); blue/purple flowers	None	None	Light: Partial shade to full sun Soil: Dry, well-drained sandy soils
<i>Sarcocornia perennis</i> Perennial glasswort	Height: 15-30 cm (6–12 in);forms mats to 1 m (3.2 ft) diam; fleshy, succulent, bright green stems; red fall color	Tolerant	Tolerant	Light: Full sun Soil: Sandy, marshy soils
<i>Solidago</i> <i>sempervirens</i> Seaside goldenrod	Height: 0.3 – 2.4 m (1-8 ft) tall; fleshy, waxy leaves; yellow flowers	Tolerant	Tolerant	Light: Full sun Soil: Sandy soils
Symphyotrichum novae-angliae New England aster	Height: 0.9 – 1.8 m (3 – 6 ft); pink/purple flowers	None	None	Light: Partial shade Soil: Moist soils
<i>Symphyotrichum</i> <i>tenuifolium</i> Perennial saltmarsh aster	Height: 0.3 – 0.6 m (1 – 2 ft); white to pale purple flowers	Tolerant	Tolerant	Light: Partial shade to full sun Soil: salt/brackish marsh soils

Teucrium	Height: 0.3 – 0.9 m (1 –	Some references	None	Light: Partial shade
canadense	3 ft); pink and white	indicate tolerance		Soil: Prefers moist or shallow, submerged soils
Canada germander	flowers			
Vernonia	Height: $0.9 - 2.1 \text{ m} (3 - 2.1 \text{ m})$	None	None	Light: Full sun
noveboracensis	7 ft); purple flowers			Soil: Prefers moist soils, but will grow in average
New York				to dry soils
Ironweed				

# **NATIVE VINES for Coastal Connecticut**

NAME	CHARACTERISTICS	SALINITY TOLERANCE		GROWTH CONDITIONS
		SPRAY	SOIL	
<i>Lathyrus</i> <i>japonicus</i> var. <i>maritimus</i> Beach pea	Perennial, trailing vine; to 0.6 m (2 ft) pink to purple flowers	Tolerant	Tolerant	Light: Full sun Soil: Sandy or loamy, well-drained soils Seeds are toxic to humans
Lonicera sempervirens Trumpet honeysuckle	Perennial; climbing or ground cover; 0.9 – 6 m (3 - 20 ft); semi- evergreen leaves, red, tubular flowers	None	None	Light: Partial shade to full sun Soil: Moist, well-drained soils