



**CAPE COD COOPERATIVE EXTENSION**  
**PO Box 367**  
**Barnstable, MA 02630**  
**508 375-6690 (www.capecodextension.org)**

**Trees & Shrubs for Coastal Environments:** Plants for this section were selected based on their ability to successfully grow in coarse soils and windy environments, and for salt spray tolerance. Plants marked with ★ will tolerate **direct coastal exposure**.

Soil Moisture

W = wet  
 M = moist  
 D = dry

Sun

SU = sun  
 PS = part shade  
 SH = shade

IND = Indicator status

OBL = Obligate  
 FACW = Facultative wetlands  
 FAC = Facultative  
 FACU = Facultative uplands

Symbols

! = Possible pests  
 # = stoloniferous  
 OC = On Center  
 c = caliper

Shrubs, low												
Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt Tol.	Opt. size	Spacing
★ <i>Arctostaphylos uva-ursi</i>	bearberry				X	X			12" x 4'	Yes	4" pot	12" OC
★ # <i>Comptonia peregrina</i>	sweet fern	FACU		X	X	X	X		2' x 3'	Yes	1-2 G	30"–36" OC
<i>Gaylussacia spp.</i>	huckleberry			X	X		X	X	1.5' x 3'		sod	3' OC
<i>Hypericum densiflorum</i>	dense St. John's wort	FAC	X	X	X	X			4' x 4'	Yes	1 G	3' OC
<i>Kalmia angustifolia</i>	sheep laurel			X	X	X	X		2' x 2'		2 G	3' OC
! ★ <i>Juniperus horizontalis</i>	creeping juniper			X	X	X			12" x 4'	Yes	1-3 G	3'–5' OC
★ <i>Prunus maritima</i>	beach plum			X	X	X	X		1-8' x 5'	Yes	5 G.	5' OC
<i>Rosa carolina</i>	pasture rose			X	X	X	X		3' x 3'		1 G	4' OC
<i>Viburnum acerifolium</i>	maple-leaved arrowwood			X	X	X	X		6' x 4'		2'-3'	5'-6' OC

Shrubs, medium												
Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt Tol.	Opt. size	Spacing
<i>Aronia arbutifolia</i>	red chokeberry	FACW		X	X	X	X		6' x 5'		1'-2'	4 -6' OC
* <i>Baccharis halimifolia</i>	groundsel tree	FACW	X	X		X			6' x 6'	Yes	1 G	4' OC
<i>Cephalanthus occidentalis</i>	buttonbush	OBL	X	X		X			6' x 6'		2'-4'	5'-8' OC
<i>Clethra alnifolia</i>	sweet pepperbush,	FAC+		X	X	X	X	X	6' x 6'		1 G	4' OC
<i>Cornus amomum</i>	silky dogwood	FACW		X		X	X		6' x 6'		2'-3'	4'-6' OC
<i>Hamamelis virginiana</i>	witch hazel	FAC-		X	X	X	X		15' x 5'		2'-4'	5' OC
<i>Ilex glabra</i>	inkberry	FACW+		X		X	X		6' x 6'	Yes	5 G	4'-5' OC
<i>Ilex verticillata</i>	winterberry	FACW+	X	X	X	X	X		10' x10'	Yes	2'-4'	4'-6' OC
! <i>Juniperus communis</i>	pasture juniper				X	X			5' x 8'	Yes	1 G	4'-5' OC
<i>Lindera benzoin</i>	spicebush	FACW-		X			X		6' x 6'		2 G	4'-5' OC
<i>Myrica gale</i>	sweet gale	OBL	X			X	X		4' x 4'		2 G	4'-5' OC
* <i>Myrica pensylvanica</i>	northern bayberry	FAC	X	X	X		X		9' x 9'	Yes	3 G	4' OC
<i>Rhododendron viscosum</i>	swamp azalea	OBL	X	X		X			5' x 5'		3'-4'	4'-5' OC
# <i>Rhus aromatica</i>	fragrant sumac			X	X	X	X		6' x 10'		2 G	4' OC
# <i>Rhus glabra</i>	smooth sumac			X	X	X			10' x 0'	Yes	2'-4'	4' OC
<i>Rosa palustris</i>	swamp rose	OBL	X			X	X	X	7' x ?		1 G	4' OC
<i>Sambucus canadensis</i>	common elderberry	FACW-	X	X		X	X	X	6' x 6'		2 G	4' OC
<i>Vaccinium corymbosum</i>	highbush blueberry	FACW-		X	X	X	X		6' x 6'		2 G	6' – 8'OC
<i>Viburnum cassinoides</i>	Witherod viburnum			X	X	X	X		6' x 6'		2 G	6' OC
<i>Viburnum dentatum</i>	arrowwood	FACW-		X	X	X	X		8' x 8'	Yes	2 G	6' OC
<i>Viburnum nudum</i>	Smooth witherod			X		X	X		6' x 6'		2 G	6' OC
<i>Viburnum trilobum</i>	Am. Cranberry viburnum	FACW		X		X	X	X	6' x 6'		2 G	6' OC

Shrubs, tall												
Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt Tol.	Opt. size	Spacing
<i>Alnus serrulata</i>	smooth alder	OBL	X	X		X			15' x15'		2'-3'	8' OC
! <i>Kalmia latifolia</i>	mountain laurel	FACU		X	X	X	X	X	10' x10'		2 G	6' OC
# <i>Rhus copallina</i>	shining sumac				X	X	X		20' x20'		2 G	5' OC
★ # <i>Rhus typhina</i>	staghorn sumac				X	X			25' x25'	Yes	2 G	6' OC

Trees, small (understory)												
Scientific Name	Common Name	IND	W	M	D	Su	PS	Sh	H x W	Salt tol.	Opt. size	Spacing
<i>Amelanchier canadensis</i>	shadbush	FAC	X	X			X	X	15' x 5'	Yes	4'-6'	8'-12'OC
! <i>Cornus florida</i>	flowering dogwood			X	X	X	X	X	20' x20'		1½"-2" c	12'-15'OC
<i>Crataegus crus-galli</i>	cockspur hawthorn			X	X	X	X		20' x 0'		1½"-2" c	12'-15'OC
! <i>Ilex opaca</i>	American holly			X		X	X		30' x 5'		4'-5'	12'-15'OC
! ★ <i>Juniperus virginiana</i>	eastern red cedar	FACU		X	X	X			35' x 5'	Yes	4'-6'	8'-10' OC
<i>Magnolia virginiana</i>	sweetbay magnolia	FACW+	X	X		X	X	X	20' x20'		3'-4'	15'-20'OC
<i>Ostrya virginiana</i>	ironwood	FACU-		X	X		X	X	25' x20'		1½" - 2" c	20' OC
<i>Sassafras albidum</i>	sassafras	FACU-		X	X	X	X		25'x25"		1½"-2" c	20' OC

Trees, tall (canopy)												
Scientific Name	Common Name	IND	W	M	D	Su	PS	Sh	H x W	Salt tol.	Opt. size	Spacing
<i>Acer rubrum</i>	red maple	FAC	X	X	X	X	X		40' x30'		2"-3" c	20' OC
<i>Betula nigra</i>	river birch	FACW	X	X		X	X		40' x35'		2" c	20' OC
<i>Celtis occidentalis</i>	hackberry	FACU		X	X	X	X		30' x35'	Yes	2" c	20' OC
<i>Chamaecyparis thyoides</i>	Atlantic white cedar	OBL	X	X			X		50' x20'		5'-8'	20' OC

<i>Fagus grandifolia</i>	American beech	FACU		X		X	X		60' x60'		2"-3" c	30' OC
<i>Fraxinus americana</i>	white ash			X		X	X		50' x40'		2"-3" c	25'-30'OC
<i>Fraxinus pennsylvanica</i>	green ash	FACW		X		X	X		50' x30'		2"-3" c	25'-30'OC
<i>Liriodendron tulipifera</i>	tulip poplar			X		X	X		70' x50'		2"-3" c	35'-40'OC
<i>Nyssa sylvatica</i>	tupelo	FACW-	X	X	X	X	X		50' x30'		2"-3" c	15'-20'OC
★! <i>Picea glauca</i>	white spruce			X	X	X			40' x20'	Yes	5'-6'	20'-25'OC
<i>Picea mariana</i>	black spruce	FACW-	X	X		X			40' x20'		5'-6'	20'-25'OC
! <i>Pinus strobus</i>	white pine	FACU		X	X	X			80' x40'		4'-8'	20'-25'OC
! <i>Quercus alba</i>	white oak			X		X			60' x40'		2½"-3" c	20' OC
! <i>Quercus bicolor</i>	swamp white oak	FACW+	X	X		X	X		60' x50'		2½"-3" c	25' OC
! <i>Quercus coccinea</i>	scarlet oak			X		X			50' x40'		2½"-3" c	20' OC
! <i>Quercus prinus</i>	chestnut oak				X	X	X		60' x60'		2½"-3" c	25' OC
! <i>Quercus rubra</i>	northern red oak	FACU-		X	X	X	X		60' x60'		2½"-3" c	25' OC
!★ <i>Quercus velutina</i>	black oak			X	X	X			60' x50'	Yes	2½"-3" c	25' OC
<i>Salix nigra</i>	black willow	FACW+	X	X		X	X		35' x20'		8'-10'	20' OC
! <i>Tilia americana</i>	American basswood	FACU		X			X		60' x40'		2"-3" c	20' OC



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## Fresh Water Resource Buffer Zone Trees & Shrubs

### Lakes, Ponds, & BVW

#### Soil Moisture

W = wet  
M = moist  
D = dry

#### Sun

SU = sun  
PS = part shade  
SH = shade

#### IND = Indicator status

OBL = Obligate  
FACW = Facultative wetlands  
FAC = Facultative  
FACU = Facultative uplands

#### Symbols

! = possible pests  
# stoloniferous  
OC = On Center  
c – caliper

#### Shrubs, low

Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt tol.	Opt. size	Spacing
* <i>Arctostaphylos uva-ursi</i>	bearberry				X	X			12" x 4'	Yes	4" pot	12" OC
<i>Aronia melanocarpa</i>	black chokeberry	FAC	X	X	X	X			6' x 6'	Yes	1 -2 G	4'-6' OC
*# <i>Comptonia peregrina</i>	sweet fern			X	X	X	X		3' x 4'	Yes	1 -2 G	30"-36" OC
<i>Gaylussacia spp.</i>	huckleberry	FACU		X	X		X	X	1.5' x 3'		sod	3' OC
<i>Hypericum densiflorum</i>	dense St. John's wort			X	X	X			4' x 4'		1 G	3' OC
! * <i>Juniperus horizontalis</i>	creeping juniper			X	X	X			12" x 4'	Yes	1 -3 G	3' -5' OC
<i>Rosa carolina</i>	pasture rose			X	X	X	X		3' x 3'		1 G	4' OC

# <i>Rubus odoratus</i>	purple flowering raspberry			X			X	X	5' x ?'		1 G	3' -4' OC
<i>Spiraea alba</i>	narrow-leaved meadowsweet	FAC+		X		X	X		5' X 3'		1 G	2'-3' OC
<i>Spiraea latifolia</i>	broad-leaved meadowsweet	FAC+		X		X	X		5' X 3'		1 G	2' -3' OC
<i>Vaccinium angustifolium</i>	late lowbush blueberry			X	X	X	X		2-3' X 2'		1 G	3' OC
<i>Viburnum acerifolium</i>	maple-leaved arrowwood			X	X		X	X	6' X 4'		2'-3'	6' OC

### Shrubs, medium

Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt tol.	Opt. size	Spacing
<i>Aronia arbutifolia</i>	red chokeberry	FACW		X	X	X	X		6' x 5'		1' -2'	4' -6' OC
<i>Cephalanthus occidentalis</i>	buttonbush	OBL	X	X		X			6' x 6'		2' -4'	5' -8' OC
<i>Cornus amomum</i>	silky dogwood	FACW		X		X	X		6' x 6'		2' -3'	4'-6' OC
<i>Hamamelis virginiana</i>	witch hazel	FAC-		X	X	X	X		15' x15'		2' -4'	5' OC
<i>Ilex verticillata</i>	winterberry holly	FACW+	X	X	X	X	X		10' x10'	Yes	2' -4'	4' -6' OC
<i>Juniperus communis</i>	pasture juniper				X	X			5' x 8'	Yes	1 G	4' -5' OC
<i>Lindera benzoin</i>	spicebush	FACW-		X	X		X		6' x 6'		2 G	4' -5' OC
<i>Rhododendron maximum</i>	rose bay rhododendron			X			X	X	15' x 15'		2' - 4'	10' OC
<i>Rhododendron periclymenoides</i>	pink azalea, pinxterbloom	FAC	X	X			X		6' x 6'		1' -2'	6' OC
<i>Rhododendron viscosum</i>	swamp azalea	OBL	X	X		X			6' x 6'		3' -4'	4' -5' OC
# <i>Rhus aromatica</i>	fragrant sumac				X	X	X		6' x 6'		2 G	4' OC
# <i>Rhus glabra</i>	sweet or smooth sumac			X	X	X			10' x10'	Yes	2' -4'	4' OC
<i>Rosa palustris</i>	swamp rose	OBL	X			X	X	X	7' x ?		1 G	4' OC
<i>Sambucus canadensis</i>	common elderberry	FACW-	X	X		X	X	X	6' x 6'		2 G	4' OC
<i>Vaccinium corymbosum</i>	highbush blueberry	FACW-		X	X	X	X		6' x 6'		2 G	6' -8' OC
<i>Viburnum cassinoides</i>	witherod			X		X	X		5' x 5'		2 G	6' OC

<i>Viburnum dentatum</i> )	arrowwood	FAC		X	X	X	X			8' x 8'	Yes	2 G	6' OC
<i>Viburnum nudum</i>	smooth witherod			X		X	X			6' X 6'		2 G	6' OC
<i>Viburnum trilobum</i>	Am. cranberrybush viburnum	FACW		X		X	X			8' X 8'		2 G	6' OC

### Shrubs, tall

Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt tol.	Opt. size	Spacing
<i>Alnus serrulata</i>	smooth alder	OBL	X	X		X			15' x15'		2'-3'	8' OC
<i>Corylus americana</i>	American hazelnut or filbert			X		X	X		10' x 8'		3'-4'	8' OC
! <i>Kalmia latifolia</i>	mountain laurel	FACU		X	X	X	X	X	10' x 10'		2 G	6' OC
# <i>Rhus copallina</i>	shining or winged sumac				X	X	X		20' x 20'	Yes	2 G	5' OC
# <i>Rhus typhina</i>	staghorn sumac				X	X			25' x 25'	Yes	2 G	6' OC
<i>Salix discolor</i>	pussy willow	FACW		X	X	X	X		15' x 15'		5'-6'	10' OC

### Trees, small (understory)

Scientific Name	Common Name	IND	W	M	D	SU	PS	SH	H x W	Salt tol.	Opt. size	Spacing
<i>Amelanchier arborea</i>	downy serviceberry				X	X	X		20' x 15'		6' -8'	15' OC
<i>Amelanchier canadensis</i>	serviceberry, shadbush	FAC		X	X		X	X	20' x 12'	Yes	6' -8'	12' OC
<i>Amelanchier laevis</i>	smooth serviceberry			X	X	X	X		25' x 18'		6' – 8'	15' OC
<i>Carpinus caroliniana</i>	American hornbeam			X			X	X	35 x 30'		3" c	15' OC
<i>Cornus alternifolia</i>	alternate-leaf dogwood			X	X		X	X	15' x 20'		8'	15' OC
! <i>Cornus florida</i>	flowering dogwood			X	X	X	X	X	20' x 20'		1½" -2" c	12' -15' OC
<i>Crataegus crus-galli</i>	cockspur hawthorn			X	X	X	X		20' x 20'			
<i>Ilex opaca</i>	American holly			X		X	X		30' x 25'		4' -5'	12'-15' OC
! ★ <i>Juniperus virginiana</i>	eastern red cedar	FACU		X	X	X			25' x 25'	Yes	4' -6'	8'-10 OC
<i>Ostrya virginiana</i>	ironwood	FACU-		X	X		X	X	25' x 20'		1½" – 2" c	20' OC

<i>Sassafras albidum</i>	sassafras	FACU-		X		X	X		25' x 25'		1½"– 2" c	20' OC
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### Trees, tall (canopy)

Scientific Name	Common Name	IND	W	M	D	Su	PS	Sh	H x W	Salt tol.	Opt. size	Spacing
<i>Acer rubrum</i>	red maple	FAC	X	X		X	X		40' x 30'		2"-3" c	20' OC
<i>Betula nigra</i>	river birch	FACW	X	X		X	X		40' x 35'		2" c	20' OC
<i>Celtis occidentalis</i>	hackberry	FACU		X	X	X	X		30' x 35'	Yes	2" c	20' OC
<i>Chamaecyparis thyoides</i>	Atlantic white cedar	OBL	X	X			X	X	50' x 20'		5' -8'	20' OC
<i>Fagus grandifolia</i>	American beech			X		X	X		60' x 60'		2"-3" c	30' OC
<i>Fraxinus americana</i>	white ash			X		X	X		50' x 40'		2"-3" c	25'-30' OC
<i>Fraxinus pennsylvanica</i>	green ash	FACW	X	X		X	X		50' x 30'		2"-3" c	25'-30' OC
<i>Liriodendron tulipifera</i>	tulip tree			X		X	X		70' x 50'		2"-3" c	35'-40' OC
<i>Nyssa sylvatica</i>	black gum, sourgum	FACW-	X	X	X	X	X		50' x 30'		2'-3" c	15'-20' OC
★! <i>Picea glauca</i>	white spruce			X	X	X			40' x 20'	Yes	5'-6'	20'-25' OC
! <i>Picea mariana</i>	black spruce	FACW-	X	X		X			40' x 20'		5'-6'	20'-25' OC
! <i>Pinus strobus</i>	white pine			X	X	X			80' x 40'		4'-8'	20'-25' OC
! <i>Platanus occidentalis</i>	American sycamore		X	X		X	X		75' x 75'		3" c	25'-30' OC
! <i>Quercus alba</i>	white oak			X		X			60' x 40'		2½" – 3" c	20' )C
! <i>Quercus bicolor</i>	swamp white oak	FACW+	X			X	X		60' x 50'		2½"-3" c	25' OC
! <i>Quercus coccinea</i>	scarlet oak			X		X			50' x 40'		2½"-3" c	20' OC
! <i>Quercus rubra</i>	northern red oak	FACU-		X	X	X	X		60' x 60'		2½"-3" c	25' OC
! <i>Quercus stellata</i>	post oak			X		X			60' x60'		2½"-3" c	25' OC
!★ <i>Quercus velutina</i>	black oak			X	X	X			60' x 60'	Yes	2½"-3" c	25' OC
<i>Salix nigra</i>	black willow	FACW+	X	X		X	X		35' x 20'		8'-10'	20' OC
<i>Tilia americana</i>	American basswood	FACU		X			X		60' x 40'		2"-3" c	20' OC