

Native Shrubs and Trees for Pollinator Conservation in Massachusetts

Below is a table with information about native shrubs and trees to consider for assessing and enhancing pollinator habitat on agricultural and wildlands. This table includes brief information on bloom timing, the basic cultural needs, and ranked pollen or nectar resources (*-*****, None, or N/A if unranked¹) of the plants. The information provided is a starting point for determining plants to use for a particular project. To find species that are available and/or hardy for a specific location, consult your state NRCS Major Land Resource Area (MLRA) plant list or other plant zone criteria. Additional information such as the geographic distribution, cultural requirements and contraindications, and wildlife benefits for various plants is available from species fact sheets like those found at the USDA PLANTS database (<http://plants.usda.gov/java/factSheet>). These are some plant species that one might consider, paying attention to overlapping bloom periods and the appropriate plant for the site conditions. This table is not exhaustive: many other shrubs and trees provide nectar and pollen for bees. This list is limited to plants known to require insect pollination and to be regionally or locally widespread or commonly found in the public marketplace as seed or nursery stock². Shrub and tree plantings may be designed for a number of concurrent purposes, such as wildlife enhancement, stream bank stabilization, windbreak, and/or conservation biological pest control.

Common Name	Scientific Name	Bloom Period	Flower Color	Growth Form	Mature Ht. (ft.)	Soil Adaptation	Drought Tolerance	Shade Tolerance	Salt Tolerance	Hedge Tolerance	Pollen Nectar
Red maple	<i>Acer rubrum</i> L.	Early Spring	Red	Single Stem	68.0	Coarse, Fine, Medium	Medium	Intermediate	None	Low	*** ***
Silver maple	<i>Acer saccharinum</i> L.	Early Spring	Yellow	Single Stem	90.0	Coarse, Fine, Medium	Low	Intermediate	Low	None	*** ***
Sugar maple	<i>Acer saccharum</i> Marshall	Mid Spring	Green	Single Stem	100.0	Coarse, Medium	Medium	Tolerant	None	None	***** **
Common serviceberry ³	<i>Amelanchier arborea</i> (Michx. f.) Fernald	Mid Spring	White	Single Stem	36.0	Coarse, Medium	Low	Tolerant	Low	Low	* *
Canadian serviceberry ³	<i>Amelanchier canadensis</i> (L.) Medik.	Mid Spring	White	Multiple Stem	23.0	Coarse, Fine, Medium	Low	Intermediate	Medium	High	* *
Allegheny serviceberry ³	<i>Amelanchier laevis</i> Wiegand	Early Spring	White	Multiple Stem	35.0	Coarse, Medium	Medium	Tolerant	Low	N/A	* *
Kinnikinnick ³	<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	Late Spring	Pink	Multiple Stem	0.5	Coarse, Medium	High	Intermediate	Medium	None	* *
Red chokeberry ³	<i>Aronia arbutifolia</i> (L.) Pers.	Mid Spring	White	Thicket Forming	5.0	Fine, Medium	Low	Intolerant	Low	N/A	** ***
Black chokeberry ³	<i>Aronia melanocarpa</i> (Michx.) Ell.	Mid Spring	White	Colonizing	6.0	Coarse, Medium	Medium	Tolerant	N/A	N/A	** ***
Northern catalpa	<i>Catalpa speciosa</i> (Warder) W. ex Engelm.	Early Summer	White	Single Stem	60.0	Coarse, Medium	Medium	Intolerant	Low	None	* **
New Jersey tea	<i>Ceanothus americanus</i> L.	Late Spring	White	Multiple Stem	3.0	Coarse, Medium	High	Tolerant	None	Low	* ***
Common buttonbush	<i>Cephalanthus occidentalis</i> L.	Mid Summer	White	Multiple Stem	15.0	Coarse, Fine, Medium	Medium	Tolerant	Low	None	** ***
Eastern redbud	<i>Cercis canadensis</i> L.	Early Spring	Purple	Multiple Stem	30.0	Fine, Medium	High	Tolerant	None	None	** **
Coastal sweetpepperbush	<i>Clethra alnifolia</i> L.	Mid Summer	White	Multiple Stem	16.0	Coarse, Medium	Low	Intermediate	None	Low	** ***
Alternateleaf dogwood ³	<i>Cornus alternifolia</i> L. f.	Early Summer	White	Multiple Stem	25.0	Medium	Low	Tolerant	None	N/A	* *
Silky dogwood ³	<i>Cornus amomum</i> Mill.	Early Summer	White	Stoloniferous	10.0	Coarse, Fine, Medium	Low	Intermediate	None	Medium	* *
Gray dogwood ³	<i>Cornus racemosa</i> Lam.	Early Summer	White	Rhizomatous	10.0	Fine, Medium	Medium	Tolerant	None	Medium	* *
American hazelnut	<i>Corylus americana</i> Walter	Early Spring	White	Multiple Stem	10.0	Fine, Medium	Medium	Intermediate	None	Low	**** None
Cockspur hawthorn ³	<i>Crataegus crus-galli</i> L.	Late Spring	White	Single Stem	30.0	Coarse, Fine, Medium	High	Intolerant	Medium	Medium	*** ***
Common persimmon	<i>Diospyros virginiana</i> L.	Late Spring	Yellow	Single Crown	55.0	Coarse, Fine, Medium	Medium	Tolerant	Low	None	* ***
Eastern teaberry ³	<i>Gaultheria procumbens</i> L.	Early Summer	White	Stoloniferous	0.5	Coarse, Medium	High	Tolerant	None	N/A	* *

Common Name	Scientific Name	Bloom Period	Flower Color	Growth Form	Mature Ht. (ft.)	Soil Adaptation	Drought Tolerance	Shade Tolerance	Salt Tolerance	Hedge Tolerance	Pollen Nectar
Black huckleberry ³	<i>Gaylussacia baccata</i> (Wangenh) Koch	Late Spring	White	Multiple Stem	4.0	Coarse, Fine, Medium	Medium	Tolerant	None	N/A	** **
Honeylocust	<i>Gleditsia triacanthos</i> L.	Late Spring	Yellow	Single Crown	70.0	Fine, Medium	High	Intolerant	Medium	Low	**** *
American witchhazel	<i>Hamamelis virginiana</i> L.	Fall	Yellow	Multiple Stem	20.0	Fine, Medium	Low	Intermediate	None	N/A	* *
Inkberry ⁴	<i>Ilex glabra</i> (L.) A. Gray	Early Summer	White	Multiple Stem	8.0	Coarse, Fine, Medium	Low	Intolerant	Medium	Medium	** ****
American holly ⁴	<i>Ilex opaca</i> Aiton	Early Summer	White	Single Stem	40.0	Coarse, Medium	Medium	Tolerant	Medium	Medium	*** ***
Common winterberry ⁴	<i>Ilex verticillata</i> (L.) A. Gray	Early Summer	White	Multiple Stem	10.0	Fine, Medium	Low	Intermediate	None	Low	**** ****
Mountain laurel	<i>Kalmia latifolia</i> L.	Late Spring	Pink	Multiple Stem	6.0	Coarse, Medium	High	Tolerant	None	N/A	** **
Northern spicebush	<i>Lindera benzoin</i> (L.) Blume	Mid Spring	White	Multiple Stem	12.0	Fine, Medium	Low	Intermediate	None	Low	* *
Tulip tree	<i>Liriodendron tulipifera</i> L.	Late Spring	Yellow	Single Stem	120.0	Coarse, Medium	Low	Intolerant	Low	None	*** *****
Maleberry	<i>Lyonia ligustrina</i> (L.) DC.	Late Spring	White	Multiple Stem	9.0	Fine, Medium	High	Tolerant	N/A	N/A	** **
Blackgum	<i>Nyssa sylvatica</i> Marshall	Late Spring	Green	Single Stem	95.0	Coarse, Medium	Low	Tolerant	Medium	None	** ****
Eastern cottonwood	<i>Populus deltoides</i> W. Bartram ex Marshall	Early Spring	Yellow	Single Stem	190.0	Coarse, Fine, Medium	Medium	Intolerant	Medium	Low	* None
Beach plum ³	<i>Prunus maritima</i> Marshall	Late Spring	White	Multiple Stem	12.0	Coarse, Medium	High	Intolerant	Low	Low	** **
Sandcherry ³	<i>Prunus pumila</i> L.	Late Spring	White	Multiple Stem	6.0	Coarse, Medium	Medium	Tolerant	None	N/A	** **
Black cherry ³	<i>Prunus serotina</i> Ehrh.	Mid Spring	White	Multiple Stem	80.0	Coarse, Medium	Medium	Intolerant	Medium	None	** **
Chokecherry ³	<i>Prunus virginiana</i> L.	Mid Spring	White	Multiple Stem	25.0	Coarse, Fine, Medium	Medium	Intolerant	Medium	Low	** **
White oak	<i>Quercus alba</i> L.	Early Spring	Yellow	Single Stem	100.0	Coarse, Medium	Medium	Intolerant	Medium	None	** None
Great laurel	<i>Rhododendron maximum</i> L.	Mid Spring	Purple	Multiple Stem	25.0	Coarse, Medium	High	Tolerant	None	N/A	** **
Swamp azalea	<i>Rhododendron viscosum</i> (L.) Torr.	Early Summer	White	Multiple Stem	16.0	Coarse, Fine, Medium	Medium	Tolerant	None	N/A	** **
Winged sumac ⁴	<i>Rhus copallinum</i> L.	Mid summer	Yellow	Rhizomatous	8.0	Coarse, Fine Medium	Medium	Intolerant	None	Low	** ****
Smooth sumac ⁴	<i>Rhus glabra</i> L.	Mid Summer	Yellow	Rhizomatous	12.0	Coarse, Medium	Medium	Intolerant	Medium	Low	** ****
Staghorn sumac ⁴	<i>Rhus typhina</i> L.	Mid Summer	Yellow	Multiple Stem	35.0	Coarse, Medium Fine	High	Intolerant	Medium	Low	** ****
Red currant	<i>Ribes triste</i> Pall.	Early Spring	White	Stoloniferous	2.0	Coarse, Medium	Low	Tolerant	None	N/A	** **
Carolina rose ³	<i>Rosa carolina</i> L.	Early Summer	White	Multiple Stem	5.0	Coarse, Medium	High	Intermediate	Medium	N/A	*** **
Swamp rose ³	<i>Rosa palustris</i> Marshall	Early Summer	Red	Rhizomatous	8.0	Fine, Medium	Low	Tolerant	None	Low	*** **
Virginia rose ³	<i>Rosa virginiana</i> Mill.	Early Summer	Purple	Rhizomatous	6.0	Coarse, Medium	Low	Intermediate	None	None	*** **

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Allegheny blackberry ³	<i>Rubus allegheniensis</i> Porter	Late Spring	White	Thicket Forming	6.0	Fine, Medium	High	Tolerant	None	Low	*** ***
Black raspberry ³	<i>Rubus occidentalis</i> L.	Late Spring	White	Thicket Forming	6.0	Fine, Medium	Medium	Intermediate	None	Low	*** ***
Bebb willow ⁴	<i>Salix bebbiana</i> Sarg.	Early Spring	Yellow	Multiple Stem	12.0	Coarse, Fine, Medium	None	Intolerant	None	Medium	*** **
Pussy willow ⁴	<i>Salix discolor</i> Muhl.	Early Spring	Yellow	Single Stem	40.0	Coarse, Fine, Medium	Low	Tolerant	None	None	*** **
Prairie willow ⁴	<i>Salix humilis</i> Marshall	Early Spring	Yellow	Multiple Stem	10.0	Coarse, Medium	Low	Intermediate	None	Low	*** **
Black willow ⁴	<i>Salix nigra</i> Marsh.	Early Spring	Yellow	Multiple Stem	100.0	Coarse, Fine, Medium	Low	Intolerant	Medium	None	*** **
American black elderberry ³	<i>Sambucus canadensis</i> L.	Mid Summer	White	Multiple Stem	7.0	Medium	Medium	Intolerant	None	Low	** *
Sassafras	<i>Sassafras albidum</i> (Nutt.) Nees	Mid Spring	Yellow	Single Stem	75.0	Coarse, Medium	High	Intolerant	None	None	** *
White meadowsweet ³	<i>Spiraea alba</i> Du Roi	Late Spring	White	Multiple Stem	3.0	Coarse, Fine, Medium	Low	Intermediate	None	N/A	* *
Steeplebush ³	<i>Spiraea tomentosa</i> L.	Summer	Pink	Rhizomatous	4.0	Coarse, Fine, Medium	Medium	Intolerant	None	N/A	* *
Common snowberry	<i>Symphoricarpos albus</i> (L.) Blake	Early Summer	White	Rhizomatous	3.0	Coarse, Fine, Medium	High	Intolerant	Medium	Low	** ****
American basswood	<i>Tilia americana</i> L.	Early Summer	Yellow	Single Stem	100.0	Coarse, Medium	Low	Tolerant	None	None	*** *****
Lowbush blueberry ³	<i>Vaccinium angustifolium</i> Aiton	Mid Spring	White	Multiple Stem	2.0	Coarse, Fine, Medium	Medium	Intolerant	None	N/A	*** ***
Highbush blueberry ³	<i>Vaccinium corymbosum</i> L.	Mid Spring	White	Multiple Stem	12.0	Coarse, Fine, Medium	Low	Tolerant	High	Low	*** ***
Mapleleaf viburnum ³	<i>Viburnum acerifolium</i> L.	Late Spring	White	Multiple Stem	6.0	Coarse, Medium	High	Tolerant	None	Low	* *
Nannyberry ³	<i>Viburnum lentago</i> L.	Late Spring	White	Multiple Stem	28.0	Fine, Medium	Low	Tolerant	None	None	* *

Sample Shrub and Tree Mixes

Below are sample shrub and tree mixes for Massachusetts farms or natural areas. Fruit farms include apple, cranberry, blueberry, or bramble farms.

Fruit Farm

- New Jersey tea, *Ceanothus americanus*
- Eastern redbud, *Cercis canadensis*
- Coastal sweetpepperbush, *Clethra alnifolia*
- Inkberry, *Ilex glabra*
- Great laurel, *Rhododendron maximum*
- Swamp azalea, *Rhododendron viscosum*
- Smooth sumac, *Rhus glabra*
- Prairie willow, *Salix humilis*

Vegetable Farm

- Red or Black chokeberry, *Aronia* spp.
- Cockspur hawthorn, *Crataegus crus-galli*
- Common winterberry, *Ilex verticillata*
- Rose, *Rosa* spp.
- Bramble, *Rubus* spp
- Smooth sumac, *Rhus glabra*
- Willow, *Salix* spp.
- Blueberry, *Vaccinium* spp.

Natural Area

- Red or Black chokeberry, *Aronia* spp.
- Dogwood, *Cornus* spp.
- Cockspur hawthorn, *Crataegus crus-galli*
- Rose, *Rosa* spp.
- Bramble, *Rubus* spp.
- Willow, *Salix* spp.
- Blueberry, *Vaccinium* spp.
- Viburnum, *Viburnum* spp.

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¹Lindtner, P. (2014). *Garden plants for honey bees*. Kalamazoo, MI: Wicwas Press. ²Always source seed or nursery stock that is free from systemic insecticides. ³Alternate host of apple, blueberry, cranberry, or bramble pathogens and pests. ⁴Dioecious: pollen-producing (male) and nectar-producing (female) flowers found on separate plants: Only female plants produce fruit.