

## **Agroforestry Species for Vermont** A project of the Farm to Plate Agroforestry Priority Strategy Team Author: Eric Toensmeier

## Suitability by Agroforestry Practice

Commercial fruits &	Serviceberry; aronia; hickory; chestnut; hybrid hazel; walnut; apple & pear; mulberry, peach, cherry & plum;				
nuts	currants & gooseberry; elderberry; highbush blueberry				
Commercial	Walnut; Eastern red cedar; white pine; Eastern cottonwood; hybrid poplar; oaks; black locust; willows				
plantation timber &					
biomass					
Commercial other	Sugar maple (syrup); witch hazel (medicinal); elderberry (medicinal); highbush cranberry (medicinal)				
Alley cropping	River locust; aronia; chestnut; hybrid hazel; walnut; apple & pear; white pine; Eastern cottonwood; hybrid poplar;				
	peach, cherry & plum; oak; currants & gooseberries; black locust; elderberry; arborvitae				
Contour hedgerow	River locust; aronia; mulberry; elderberry				
Pollinator hedgerow	Serviceberry; river locust; red osier dogwood; apple & pear; American plum, peach, cherry & plum; chokecherry;				
	black locust; willows; elderberry; highbush blueberry; highbush cranberry				
Forest farming	Sugar maple; witch hazel; mulberry; currants & gooseberries; black locust				
Urban food forest	Sugar maple; serviceberry; river locust; aronia; hickory; chestnut; hybrid hazel; witch hazel; walnut; apple & pear;				
	mulberry; American plum; peach, cherry & plum; chokecherry; currants & gooseberries; black locust; elderberry;				
	highbush blueberry; highbush cranberry				
Windbreak	Sugar maple; serviceberry; river locust; aronia; hickory; red osier dogwood; hybrid hazel; honey locust; walnut;				
	Eastern red cedar; mulberry; white pine; Eastern cottonwood; hybrid poplar; American plum; chokecherry; oaks;				
	black locust; willows; elderberry; arborvitae; highbush cranberry				
Living snow fence	Red osier dogwood; willows; arborvitae; highbush blueberry; Eastern red cedar; American plum				
Silvopasture	Sugar maple; river locust; honey locust; walnut; mulberry; white pine; Eastern cottonwood; hybrid poplar; oaks;				
	black locust; willows; elderberry				
Tree fodder (leaves)	River locust; mulberry; Eastern cottonwood; hybrid poplar; black locust; willows				
Tree fodder (mast)	Honey locust; mulberry; oaks				
Living barn	Eastern red cedar; white pine; arborvitae				
Riparian buffer	Sugar maple; serviceberry; aronia; hickory; red osier dogwood; honey locust; witch hazel; white pine; Eastern				
	cottonwood; hybrid poplar; chokecherry; oaks; willows; elderberry; arborvitae; highbush blueberry; highbush				
	cranberry				
Waterbreak	River locust; aronia; red osier dogwood; honey locust; Eastern cottonwood; hybrid poplar; oaks; willows;				
	elderberry; arborvitae; highbush blueberry; highbush cranberry				

## **Recommended Species Details** \*Functional agroforestry cultivars available.

Species	Commercial Products	Systems	Functions	Tolerances
Sugar maple Acer saccharum	Syrup	Windbreak, silvopasture, riparian buffer, forest farming, urban food forest	Native, conservation, wildlife (moderate), pollinators, caterpillars	Sand, shade
Serviceberry Amelanchier spp.	Fruit (some)	Pollinator hedgerow, urban food forest, windbreak, riparian buffer	Native, conservation, wildlife (high), erosion control, pollinators,	Dry, sand, poor drainage, acid, shade (depends on species)
River locust* Amorpha fruticosa		Alley cropping, contour hedgerow, pollinator hedgerow, urban food forest, windbreak, silvopasture, tree fodder, waterbreak	Nitrogen fixation, erosion control, pollinators	Wet, dry, sand, poor drainage, excessive drainage, acid, alkaline, flooding.
Aronia Aronia melanocarpa	Fruit	Alley cropping, contour hedgerow, urban food forest, windbreak, riparian buffer, waterbreak	Native, conservation, erosion control, pollinators	Wet, dry, sand, clay, poor drainage, excessive drainage, acid, flooding
Hickory Carya spp.	Nuts, oil	Urban food forest, windbreak, riparian buffer	Native, conservation, erosion control, wildlife (moderate), caterpillars	Wet, dry, sand, excessive drainage, acid (depends on species)
Chestnut Castanea spp.	Nuts	Alley cropping, urban food forest	Caterpillars	Sand, acid
Red osier dogwood* Cornus sericea		Pollinator hedgerow, windbreak, living snow fence, riparian buffer, waterbreak	Native, conservation, erosion control, bank stabilization, wildlife (high), pollinators	Wet, alkaline, flood, shade

Hybrid hazel Corylus spp.	Nuts	Alley cropping, urban food forest, windbreak	Caterpillars	Sand, clay, acid
Honey locust*		Windbreak, silvopasture, fodder	Erosion control, pollinators	Dry, clay, poor
<i>Gleditsia triacanthos</i> Witch hazel	Medicinal	tree, riparian buffer, waterbreak Forest farming, urban food forest,	Native, conservation,	drainage, flood Dry, sand, alkaline
Hamamelis virginiana		windbreak, riparian buffer	erosion control, pollinators	
Walnut	Nuts, veneers,	Alley cropping, urban food forest,	Native (some), conservation,	Clay, alkaline (depends
Juglans spp.	lumber	windbreak, silvopasture	wildlife (medium to high), caterpillars	on species)
Eastern red cedar Juniperus virginiana	Lumber, posts, veneers	Windbreak, living snow fence, living barn	Native, conservation, erosion control, wildlife (high)	Dry, sand, clay, excessive drainage
Apple & pear Malus pumila, Pyrus spp.	Fruit	Alley cropping, pollinator hedgerow, urban food forest	Pollinators, caterpillars	
Mulberry* Morus alba & M. rubra	Fruit	Contour hedgerow, forest farming, urban food forest, windbreak, silvopasture, tree fodder	Native (some), erosion control	Dry, sand (depends in species)
White pine Pinus strobus	Lumber, veneers, pulpwood	Alley cropping, windbreak, silvopasture, living barn, riparian buffer	Native, conservation, erosion control, wildlife (high), caterpillars	Sand, clay, poor drainage, acid, shade
Eastern cottonwood* Populus deltoides	Lumber, veneers pulpwood, biomass	Alley cropping, windbreak, silvopasture, tree fodder, riparian buffer, waterbreak	Native, conservation, erosion control, bank stabilization, wildlife (moderate), caterpillars	Wet, sand, clay, poor drainage, excessive drainage, flood, shade
Hybrid poplar* Populus hybrids	Lumber, veneers pulpwood, biomass	Alley cropping, windbreak, silvopasture, tree fodder, riparian buffer, waterbreak	Erosion control, caterpillars	Wet, sand, clay, poor drainage, excessive drainage, flood (depends on cultivar)
American plum* Prunus americana		Pollinator hedgerow, urban food forest, windbreak, living snow fence	Native, erosion control, pollinators, caterpillars	Dry, acid
Peach, cherry, plum Prunus spp.	Fruit	Alley cropping, pollinator hedgerow, urban food forest	Pollinators, caterpillars	
Chokecherry* Prunus virginiana	Fruit	Pollinator hedgerow, urban food forest windbreak, riparian buffer	Native, conservation, erosion control, pollinators caterpillars	Dry, sand, clay, acid, alkaline, shade
Oaks* Quercus spp.	Lumber, veneers	Alley cropping, windbreak, silvopasture, tree fodder (mast), riparian forest buffer, waterbreak	Native, conservation, erosion control, wildlife (very high), caterpillars	Dry, sand, clay, flood (depends on species)
Currants & Gooseberry <i>Ribes spp.</i>	Fruit	Alley cropping, forest farming, urban food forest	Pollinators	Acid, shade
Black locust* Robinia pseudoacacia	Lumber, posts, pulpwood, biomass	Alley cropping, pollinator hedgerow, forest farming, urban food forest, windbreak, silvopasture, tree fodder	Nitrogen fixation, erosion control, pollinators	Dry, sand, excessive drainage, acid
Willows* Salix spp.	Pulpwood, biomass	Alley cropping, pollinator hedgerow, windbreak, living snow fence, silvopasture, tree fodder, riparian buffer, waterbreak	Native (some), conservation, erosion control, bank stabilization, wildlife (medium), pollinators, caterpillars	Wet, sand, clay, poor drainage, acid, flood (depends on species)
Elderberry* Sambucus spp.	Fruit, medicinal	Alley cropping, contour hedgerow, pollinator hedgerow, urban food forest, windbreak, silvopasture, riparian buffer, waterbreak	Native (some), conservation, erosion control, wildlife (high), pollinators	Wet, dry, sand, clay, poor drainage, acid, flood
Arborvitae* Thuja occidentalis		Alley cropping, windbreak, living snow fence, living barn, riparian buffer, waterbreak	Native, conservation, erosion control, wildlife (medium)	Wet, clay, flood, shade
Highbush blueberry Vaccinium corymbosum	Fruit	Pollinator hedgerow, urban food forest, living snow fence, riparian buffer, waterbreak	Native, conservation, erosion control, wildlife (high), pollinators, caterpillars	Wet, dry, sand, clay, poor drainage, acid, flood
Highbush cranberry* Viburnum opulus americanum	Medicinal	Pollinator hedgerow, urban food forest, windbreak, riparian buffer, waterbreak	Native, conservation, erosion control, wildlife (medium), pollinators	Wet, clay, poor drainage, flood