**Part I: Woody Trees, Shrubs and Vines**

**For a Changing Minnesota: Cold Hardy Zones 2 & 3**

This list should by no means be considered exhaustive. If there are cultivated varieties or species that are known to perform well in northern Minnesota, consider them as you put together your plant palette.

Plant names followed by an \* represent plants native to the upper Midwest.

**Deciduous Trees**

Scientific Name Common Name Size

|  |  |  |
| --- | --- | --- |
| Acer negundo\* | Boxelder Maple | Medium |
| Acer rubrum\* | Red Maple | Large |
| Acer saccharinum\* | Silver Maple | Large |
| Acer saccharum\* | Sugar Maple | Large |
| Acer triflorum | 3-Flowered Maple | Small-Med |
| Aesculus glabra | Ohio Buckeye | Medium |
| Amelanchier x grandiflora | ‘Autumn Brilliance’ Serviceberry | Small |
| Betula lenta\* | Sweet Birch | Medium |
| Betula nigra\* | River Birch | Medium |
| Betula papyrifera\* | Paper Birch | Medium |
| Betula pendula | Weeping Cutleaf Birch | Medium |
| Betula platyphylla | ‘Dakota Pinnacle’ Birch | Medium and narrow |
| Carpinus caroliniana\* | Blue Beech | Small |
| Celtis occidentalis\* | Hackberry | Large |
| Cornus alternifolia\* | Pagoda Dogwood | Small |
| Crataegus species | ‘Snowbird’ Hawthorn | Small |
| Fraxinus mandshurica | Manchurian Ash | Medium |
| Larix laricina\* | American Larch | Large |
| Macckia amurense | Amur Maackia | Small-Med |
| Malus species | Flowering Crabapples | Small-Med |
| Ostrya virginiana\* | Ironwood | Medium |
| Phellodendron amurense | Amur Corktree…only purchase and plant male varieties | Medium |
| Populus balsamifera\* | Balsam Poplar | Medium |
| Populus grandidentata\* | Big-toothed Aspen | Large |
| Populus deltoides\* | Eastern Cottonwood…only plant male trees to avoid seed | Large |
| Prunus maackii | Amur Chokecherry | Small |
| Prunus pennsylvanica\* | Pin Cherry | Small-Med |
| Prunus serotina\* | Black Cherry | Large |
| Quercus alba\* | White Oak | Large |
| Quercus ellipsoidalis\* | Northern Pin Oak | Large |
| Quercus macrocarpa\* | Bur Oak…NOT Burr Oak | Large |
| Quercus rubra\* | Northern Red Oak | Large |
| Quercus x bimundorum | ‘Prairie Stature’ Oak | Large |
| Salix species | ‘Prairie Cascade’ Willow | Med-Large |
| Salix pentandra\* | Laurel Willow | Med-Large |
| Sorbus aucuparia | European Mountain-ash | Small |
| Sorbus decora\* | Showy Mountain-ash | Small |
| Syringa pekinensis | Peking Tree Lilac | Small |
| Tilia americana\* | Basswood – ‘Redmond’ and ‘Boulevard’ are good urban varieties | Large |
| Tilia x mongolica | ‘Harvest Gold’ Basswood | Large |
| Ulmus americana\* | ‘Prairie Expedition’ American Elm | Large |
| Ulmus japonica | ‘Discovery’ Elm | Medium |

Most deciduous trees perform best in well-drained soils, organic, neutral to acidic, not compacted, full sun to moderate levels of shade. Therefore, just because a tree is cold-hardy to an area doesn’t mean it will perform well. Assess the planting site thoroughly and select the best plants for the site carefully.

**Evergreen Trees**

Scientific Name Common Name Size

|  |  |  |
| --- | --- | --- |
| Abies balsamea\* | Balsam Fir | Large |
| Juniperus virginiana\* | Eastern Red Cedar | Small-Med |
| Picea abies | Norway Spruce | Large |
| Picea glauca\* | White Spruce | Large |
| Picea mariana\* | Black Spruce | Medium |
| Picea pungens\* | Colorado Spruce | Large |
| Pinus banksiana\* | Jack Pine | Medium |
| Pinus cembra | Swiss Stone Pine | Small |
| Pinus ponderosa | Ponderosa Pine | Large |
| Pinus resinosa\* | Red/Norway Pine | Large |
| Pinus strobus\* | Eastern White Pine | Large |
| Thuja occidentalis | Northern White Cedar | Small-Medium |
| Tsuga canadensis | Hemlock | Medium |

Evergreen trees are generally much slower growing than deciduous trees, require regular watering through late autumn to help them establish after planting, and are usually purchased as containerized trees or balled-and-burlapped, which often makes them more expensive than deciduous trees.

With the exception of Hemlock, Northern White Cedar, White Pine and Balsam Fir, evergreen trees perform poorly in shaded landscapes.

**Small, Medium, Large? It’s all relative.**

A small tree is one that usually doesn’t grow any taller than around 30 feet. A medium tree matures up to 50 feet. A large tree reliably grows up to more than 50 feet.

A small shrub stays less than 3 feet in height. A medium shrub can grow up to around 6 feet in height. A large shrub reliably matures at 6 or more feet in height.

**Shrubs (deciduous unless noted)**

Scientific Name Common Name Size

|  |  |  |
| --- | --- | --- |
| Amelanchier alnifolia\* | Serviceberry | Medium |
| Aronia melanocarpa\* | Black Chokeberry | Small-Med |
| Cornus sericea \*(aka stolonifera) | Red-twig Dogwood | Small-Med depending on varieties |
| Dirca palustris\* | Leatherwood | Small |
| Diervilla lonicera\* | Dwarf Bush Honeysuckle | Small |
| Forsythia species | ‘Meadowlark’ and ‘Northern Gold’ | Medium-Large |
| Hydrangea arborescens | Wild Hydrangea | Medium |
| Hydrangea paniculata | ‘P.G. Hydrangea’ | Large |
| Ilex verticillata\* | Winterberry Holly | Medium |
| Juniperus communis\* | Common Juniper | Small-Medium Evergreen |
| Physocarpus opulifolius\* | Common Ninebark | Large |
| Pinus mugo | Mugo Pine | Medium-Large Evergreen |
| Prunus tomentosa\* | Nanking Cherry | Medium |
| Rhus glabra\* | Smooth Sumac | Large |
| Rhus typhina\* | Staghorn Sumac | Large |
| Salix discolor\* | Pussy Willow | Medium-Large |
| Syringa patula | ‘Miss Kim’ Lilac | Medium-Large |
| Syringa vulgaris\* | Common Lilac | Large |
| Syringa x prestoniae | ‘James Macfarlane’ and ‘Nocturne’ | Large |
| Syringa x meyerii | ‘Tinkerbelle’ | Small-Medium |
| Viburnum lantana\* | Wayfaring Tree | Large |
| Viburnum lentago\* | Nannyberry Viburnum | Large |
| Viburnum trilobum\* | American Cranberrybush | Large |
| Viburnum prunifolium\* | Blackhaw Viburnum | Large |
| Viburnum opulus | European Cranberrybush | Medium-Large |
| Viburnum dentatum\* | Arrowwood Viburnum | Medium |

**Woody Deciduous Vines**

Scientific Name Common Name Growth Rate

|  |  |  |
| --- | --- | --- |
| Celastrus scandens\* | American Bittersweet | Moderate. Make sure you get American bittersweet, not Oriental Bittersweet which is very invasive. |
| Clematis virginiana | Virgins Bower Clematis | Moderate-Fast |
| Humulus lupulus | Common Hop Vine | Fast-Moderate |
| Lonicera x brownie | Dropmore Scarlet Honeysuckle | Moderate |
| Parthenocissus inserta\* | Woodbine | Fast |
| Vitis riparia | Riverbank Grape | Too Fast…be careful where you plant this very aggressive vine. |

**Part II: Woody Trees, Shrubs and Vines**

**For Minnesota’s Cold Hardy Zones 4 and 5**

**Deciduous Trees**

**Scientific Name Common Name Size**

|  |  |  |
| --- | --- | --- |
| **Acer campestre** | **Hedge Maple** | **Small** |
| **Acer x freemanii ‘Sienna Glen’** | **Freeman Maple** | **Med to large** |
| **Acer rubrum\*** | **Red Maple** | **Med to Large** |
| **Acer saccharinum\*** | **Silver Maple** | **Large** |
| **Acer truncatum** | **Shangtung Maple** | **Medium** |
| **Aesculus glabra\*** | **Ohio Buckeye** | **Small to Medium** |
| **Amelanchier species** | **Serviceberry** | **Small** |
| **Betula nigra\* ‘Dura Heat’** | **River Birch** | **Medium** |
| **Carpinus caroliniana\*** | **Blue Beech** | **Small** |
| **Carya ovata\*** | **Shagbark Hickory** | **Medium** |
| **Celtis occidentalis\*** | **Hackberry** | **Large** |
| **Cercidiphyllum japonicum** | **Katsura Tree** | **Medium** |
| **Cercis Canadensis\*** | **Redbud MN strain** | **Small** |
| **Cladrastis kentukia** | **Yellowwood** | **Medium** |
| **Cornus alternifolia\*** | **Pagoda Dogwood** | **Small** |
| **Corylus colurna** | **Turkish Filbert** | **Medium** |
| **Crataegus crus-galli\*** | **Cockspur Hawthorn**  | **Small** |
| **Fraxinus mandshurica** | **Manchurian Ash** | **Medium** |
| **Fraxinus quadrangulata\*** | **Blue Ash** | **Medium** |
| **Ginkgo biloba** | **Ginkgo** | **Medium to Large** |
| **Gleditsia triacanthos var inermis\*** | **Honeylocust variety Northern Acclaim** | **Medium** |
| **Gymnocladus dioicus\*** | **Kentucky Coffeetree** | **Large** |
| **Juglans nigra\*** | **Black Walnut** | **Large** |
| **Koelreuteria paniculata** | **Golden Raintree** | **Small to medium** |
| **Larix siberica** | **Siberian Larch** | **Large** |
| **Liriodendron tulipifera** | **Tulip Poplar** | **Large** |
| **Maackia amurensis** | **Amur Maackia** | **Small to Medium** |
| **Maclura pomifera\*** | **Osage-Orange** | **Small** |
| **Malus species\*** | **Crabapples**  | **Small** |
| **Metasequoia glyptostroboides** | **Dawn Redwood** | **Med-Large** |
| **Nyssa sylvatica** | **Black Tupelo** | **Medium** |
| **Ostrya virginiana\*** | **Ironwood** | **Small to Medium** |
| **Phellodendron amurense** | **Amur Corktree (only males)** | **Medium** |
| **Platanus occidentalis\*** | **Sycamore** | **Large** |
| **Populus deltoides\*** | **Cottonwood** | **Large** |
| **Populus grandidentata\*** | **Big-toothed Aspen** | **Large** |
| **Prunus americana\*** | **American Plum** | **Small** |
| **Prunus armeniaca var mandshurica** | **Manchurian Apricot** | **Small** |
| **Prunus maackii** | **Amur Chokecherry** | **Small**  |
| **Prunus serotina\*** | **Black Cherry** | **Large** |
| **Ptelea trifoliate** | **Wafer-ash** | **Small** |
| **Quercus alba** | **White Oak** | **Large** |
| **Quercus coccinea\*** | **Scarlet Oak** | **Large** |
| **Quercus ellipsoidalis\*** | **Northern Pin Oak** | **Large** |
| **Quercus imbricaria** | **Shingle Oak** | **Medium** |
| **Quercus macrocarpa\*** | **Bur Oak** | **Large** |
| **Quercus mongolica** | **Mongolian Oak** |  **Medium** |
| **Sophora japonica** | **Japanese Pagoda-tree** | **Medium** |
| **Sorbus alnifolia** | **Korean Mountain-ash** | **Medium** |
| **Syringa pekinensis** | **Peking Tree Lilac** | **Small** |
| **Taxodium distichum** | **Bald Cypress** | **Large** |
| **Tilia americana\*** | **Basswood** | **large** |
| **Tilia tomentosa** | **Silver Linden** | **Large** |
| **Ulmus americana\***  | **‘Prairie Expedition’ ‘Jeffereson’** | **Large** |
| **Ulmus hybrids** | **‘Accolade’ ‘Triumph’ ‘Danada Charm’****‘Frontier’** | **Medium to Large** |
| **Zelkova serrata** | **Zelkova** | **Medium** |

**Evergreen Trees**

Scientific Name Common Name Size

|  |  |  |
| --- | --- | --- |
| Abies concolor | White Fir | Large |
| Juniperus scopulorum | Rocky Mountain Juniper | Small-Med |
| Juniperus virginiana\* | Eastern Red Cedar | Small-Med |
| Picea abies | Norway Spruce | Large |
| Picea glauca\* | White Spruce | Large |
| Picea pungens\* | Colorado Spruce | Large |
| Pinus banksiana\* | Jack Pine | Medium |
| Pinus cembra | Swiss Stone Pine | Small |
| Picea omorika | Serbian Spruce | Large |
| Pinus ponderosa | Ponderosa Pine | Large |
| Pinus resinosa\* | Red/Norway Pine | Large |
| Pinus strobus\* | Eastern White Pine | Large |
| Pinus sylvestris | Scot’s Pine | Medium |
| Thuja occidentalis | Northern White Cedar | Small-Medium |
| Tsuga canadensis | Hemlock | Medium |

**Shrubs (deciduous unless noted)**

Scientific Name Common Name Size

|  |  |  |
| --- | --- | --- |
| Amelanchier alnifolia\* | Serviceberry | Medium |
| Aronia melanocarpa\* | Black Chokeberry | Small-Med |
| Cornus sericea \*(aka stolonifera) | Red-twig Dogwood | Small-Med depending on varieties |
| Dirca palustris\* | Leatherwood | Small |
| Diervilla lonicera\* | Dwarf Bush Honeysuckle | Small |
| Forsythia species | ‘Meadowlark’ and ‘Northern Gold’ | Medium-Large |
| Hydrangea arborescens | Wild Hydrangea | Medium |
| Hydrangea paniculata | ‘P.G. Hydrangea’ | Large |
| Hydrangea quercifolia | Oak Leaf Hydrangea | Medium-Large |
| Ilex verticillata\* | Winterberry Holly | Medium |
| Juniperus communis\* | Common Juniper | Small-Medium Evergreen |
| Kolkwitzia amabilis | Beauty Bush | Large |
| Kerria japonica | Japanese Kerria | Medium |
| Physocarpus opulifolius\* | Common Ninebark | Large |
| Pinus mugo | Mugo Pine | Medium-Large Evergreen |
| Prunus tomentosa\* | Nanking Cherry | Medium |
| Rhodotypos scandens | Jet Bead | Medium |
| Rhus glabra\* | Smooth Sumac | Large |
| Rhus typhina\* | Staghorn Sumac | Large |
| Salix discolor\* | Pussy Willow | Medium-Large |
| Syringa patula | ‘Miss Kim’ Lilac | Medium-Large |
| Syringa vulgaris\* | Common Lilac | Large |
| Syringa x prestoniae | ‘James Macfarlane’ and ‘Nocturne’ | Large |
| Syringa x meyerii | ‘Tinkerbelle’ | Small-Medium |
| Viburnum lantana\* | Wayfaring Tree | Large |
| Viburnum lentago\* | Nannyberry Viburnum | Large |
| Viburnum trilobum\* | American Cranberrybush | Large |
| Viburnum prunifolium\* | Blackhaw Viburnum | Large |
| Viburnum opulus | European Cranberrybush | Medium-Large |
| Viburnum dentatum\* | Arrowwood Viburnum | Medium |

**Woody Deciduous Vines**

Scientific Name Common Name Growth Rate

|  |  |  |
| --- | --- | --- |
| Campsis radicans | Trumpet Vine | Fast |
| Celastrus scandens\* | American Bittersweet | Moderate. Make sure you get American bittersweet, not Oriental Bittersweet which is very invasive. |
| Clematis virginiana | Virgins Bower Clematis | Moderate-Fast |
| Humulus lupulus | Common Hop Vine | Fast-Moderate |
| Hydrangea anomala petiolaris | Climbing Hydrangea  | Moderate to Fast |
| Lonicera x brownie | Dropmore Scarlet Honeysuckle | Moderate |
| Parthenocissus inserta\* | Woodbine | Fast |
| Vitis riparia | Riverbank Grape | Too Fast…be careful where you plant this very aggressive vine. |
| Wisteria frutescens | American Wisteria | Moderate to Fast |

**This plant list was prepared by Gary Johnson, Urban Forestry Outreach Research and Extension (UFore) Lab, University of Minnesota, Department of Forest Resources**

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