

**City of Biddeford
Sustainability Commission**

December 1, 2025 at 5:30 PM

City Hall Second Floor Conference Room & Zoom

<https://biddeford.zoom.us/j/99324059510?pwd=hSwRupSZWs4xRL59Dk15Mbsu2ueVvO.1>

Or call in by phone: +1 312 626 6799

Meeting ID: 993 2405 9510

Passcode: 379513

1. Declaration of Quorum
2. Approval of Meeting Minutes
 - 2.a Approval of Meeting Minutes from November 3, 2025 & November 17, 2025
3. Discussion
 - 3.a Adopt a Park, Sign-up
 - 3.b Planning Board Workshop for EV Ordinance—December 3, 2025
 - 3.c Next Meeting (Holiday Season)
4. Old Business-Landscape Ordinance Review
 - 4.a Landscape Ordinance Review
5. Adjourn

Sustainability Communion

Meeting Minutes

November 3, 2025

In attendance:

Will Kochtitzky

Brad Crickard

Patrick Conlon

Brad Favreau

Kathy and Ken Griffin also in attendance

Absent:

Bev Thorpe

Joie Granbois

Max Zakian

Mickaela Greenwald

Resigned:

Wendy Johnson

No quorum

Discussion items:

1. This commission will present before City Council on November 18 to discuss the work we have done this year. Brad will create a power point slideshow based on our 2025 workplan and Will K. will present. All members are encouraged to attend this meeting.
2. At last meeting Brad introduced the idea of adopting the park at 315 Main Street. The commission discussed this at the time. Brad mentioned it again and we hope to vote on this item at next meeting.
3. The solar ordinance is wending its way through Policy Committee. As soon as the Assessing Department has the capacity to place a value on a hypothetical solar array, it will go back before Policy.
4. The commission has approximately \$30,000 in our budget. The commission began discussions about a suitable project for these funds. One possibility is a dune grass-planting project at the public beaches. Other possibilities will be talked about over the coming weeks.

5. Will introduced a grant opportunity from Climate Smart Communities Initiative. We will discuss this opportunity and identify a strong project to submit with an application by March 2026. Some possibilities (adaptation) are shade/tree projects and dune project. Also, we may re-submit our application from last spring. This [project was to strengthen climate and sustainability in school curricula. Brad will discuss this with Gayle Bowness of GMRI.
6. The commission discussed final edits to the EV charging ordinance drafted by Will. Brad will clean up the draft for a vote next meeting.

[the planning board has suggested this item to be “workshopped” at an upcoming PB meeting. Brad will schedule this with David Galbraith.]

BIDDEFORD SUSTAINABILITY COMMISSION 11/17/25

PRESENT: Will Kochtitsky, Max, Mikaela, Beth, Jeff (and Patrick came late)

Brad Favreau was present, with two community guests

Began 5:35pm

1. Could not approve prior minutes because they were not uploaded to agenda.
2. There was discussion about nominating a current commissioner to be the new secretary, since the prior secretary had gone to college in another city. Jeff Goldsmith was nominated to become secretary; and Max made a motion, Beth seconded the motion, and Jeff was unanimously approved as secretary.
3. The commissioners discussed the agenda for the presentation to the City Council meeting the next day, 11/18/25 at 6pm. Will Kochtitsky will present a brief slide show to City Council and take questions. Commissioners were invited to attend and be introduced to the City Councilors, Mayor, Mayor-elect, and new City Manager. This would be the Commissioners' Annual Report to City Council, as prescribed by the ordinance to establish the Sustainability Commission.
4. There was discussion about the approved commissioners. Emily McCauley will be the new student commissioners for the Sustainability Commission to replace Sam. Wendy resigned and there were possible nominations for the vacancy. Brad will send the two commissioners the link to apply for becoming a commissioner, who can forward these to the interested parties.
5. There was discussion about updating the list of native plants for the landscaping ordinance being drafted now. There was discussion about the possibility of transplanting native plants from private property to a municipal plot, and the cost effectiveness of such a plan of action.
6. There was a discussion about the Commissioners adopting a Biddeford park to sponsor and take care of. Will Kochtitsky made a motion to Adopt a Park and Max seconded the motion. Four commissioners voted to approve and one abstained. Brad will create a work template to help the commissioners select the jobs that they can do; and Beth offered to request guidance and assistance from other groups in the area of the park location.
7. The EV Ordinance draft is still being reviewed by Biddeford's municipal planning board. Max made a motion to adopt the current EV Ordinance draft and Beth seconded this motion. It was unanimously approved.
8. The community visitors made their comments.

9. Max made a motion to adjourn the commission at 6:51pm and Beth seconded. It was approved unanimously.

Article VI Performance Standards

Section 12.1 Landscape Standards

A. Purpose

The purpose of this ordinance is to provide minimum requirements for landscaping of proposed development to maintain a base standard of quality of life and general appearance for private and public properties in the City.

It is the intent of this ordinance to encourage the use of landscaped areas to promote Low Impact Development (LID), stormwater management systems, and to reduce the amount of impervious surface heat islands in urban areas, both of which are recommended strategies in the Biddeford Climate Action Plan.

B. Applicability

All landscaping approved after the effective date of this Ordinance shall comply with these requirements. This includes, but is not limited to, new landscape, replacement planting, or any other landscaping proposed through the Site Plan Review or Subdivision Review process.

C. Definitions

Balled-and-Burlapped Plants: Balled-and-burlapped (or B&B) trees and shrubs are grown in nursery rows.

Bare-Root Plants: Bare-root plants are grown in the field, then harvested. The soil is washed or shaken from their roots after digging. Nearly all are dormant.

Buffer: A combination of physical space and vertical elements, such as but not limited to plants, berms, fences or walls, the purpose of which is to separate and screen incompatible land uses from each other.

Container Grown Plants: Container-grown refers to a plant that has been grown in a container or one that has been transplanted into a container from the field.

Diameter at Breast Height (DBH): DBH is the diameter of a tree measured 4.5 feet above the ground.

Greenspace: Greenspaces are pervious areas of grass, trees or other vegetation, for recreation or aesthetic purposes.

Groundcover: Low-growing, spreading vegetation.

Impervious surface: The total area of a parcel that consists of buildings and any associated structures as well as roads, driveways, and parking areas, whether paved or unpaved and any additional area that is covered with a low-permeability material such as asphalt, stone or concrete or compacted through design or use to reduce permeability

Invasive Species: an organism not native to the region and one that is likely to cause harm to the environment, infrastructure, or public health. For the purposes of this ordinance, invasive species are those enumerated in the Advisory List of Invasive Plants by the Maine Department of Agriculture, Conservation & Forestry.

Landscape Plan: A component of a development plan which shows the quantity, species, and size of all proposed vegetation.

Landscape Planter strip: A vegetated area (naturally vegetated and/or landscaped) located adjacent and parallel to a road or street and designed to visually and functionally separate the roadway from the abutting property upon which it is located.

Native Plants: A native or indigenous plant species is one that occurs in a particular place without the aid of humans. They are well adapted to the climate, light, and soil conditions that characterize their ecosystem. Species native to North America are generally recognized as those occurring on the continent prior to European settlement.

Open space: All dedicated portions of a parcel that has vegetated surfaces or is in an undisturbed natural state, such as a wetland or forested area. Vegetated rooftops or portions of a parking area that are landscaped are considered open space per this definition. Areas designated as outdoor storage are not considered open space.

Outdoor Storage Area: a designated space outside of a building for the storage of commercial inventory including but not limited to equipment, vehicles, construction materials, or packaged goods.

Rain Garden: a depressed area in the landscape, planted with grasses and or flowering perennials, that collects rain water from a roof, driveway or street and allows it to soak into the ground alleviating storm water runoff.

Screening: A method of significantly reducing the impact of noise and unsightly visual intrusions with less offensive or more harmonious elements, such as plants, berms, fences, walls, or any appropriate combination thereof. This is accomplished either by a strip of dense existing or planted vegetation at least four feet in height, an opaque wall of at least six feet in height, or a uniformly covered fence at least six feet in height

Street Tree: A tree that grows within a right-of-way or twenty-five feet from the edge of a right-of-way, intended to provide shade for pedestrians and a separation between the property and abutting streets and structures.

D. General Landscaping Requirements

Landscaping shall be designed as an integral part of an overall site or subdivision plan with the purpose of enhancing building design, public views and spaces, while also providing buffering and screening to abutting properties and roads when appropriate.

Native species should be selected for their benefits of conserving water, protecting soil from erosion, creating habitat and providing food for many different animals including birds, pollinators, and small mammals, thereby generally promoting plant and animal biodiversity. Invasive species are prohibited. Lists of recommended and prohibited species are maintained by the Planning & Development Department.

Invasive species, as enumerated by the Maine Department of Agriculture, Conservation, and Forestry, shall not be considered in landscape plans and explicitly avoided.

E. Landscaping Plan Required

1. Unless otherwise directed by the Approval Authority (Planning Board, Staff Review Committee, or City Planner) a landscaping plan prepared by a licensed landscape architect is required for the following proposed projects. At the City Planner's discretion, a qualified professional other than a licensed landscape architect may create such plan:
 - a. Projects requiring Site Plan review per Part III, Article XI, Site Plan Review;
 - b. Projects requiring Subdivision review per Part II, Chapter 66, Subdivisions;
 - c. The construction of 20,000 or more square feet of outdoor storage area;
 - d. The expansion of an existing parking lot by greater than 20% of total spaces measured over a five-year period, unless the number of existing spaces is fewer than 10 spaces;
 - e. The expansion of an existing impervious surface area by greater than 20% of the total area, measured over a 5-year period, unless the area of impervious surface is fewer than 4,000 square feet;
 - f. The expansion of an existing outdoor storage area by greater than 20% of the total area, as measured over a 5-year period.
2. The required landscape plan may be waived or modified by the Approval Authority (Planning Board, City Planner or Staff Review Committee) under special circumstances:
 - a. The preservation of unique wildlife habitat
 - b. The preservation of mature vegetation or natural areas
 - c. Compliance with easements such as providing public access, conservation, or utility maintenance.
 - d. Redevelopment of existing properties where the requirements in this title are impossible to meet; however, new construction on previously developed sites must comply with all standards herein.
 - e. Insufficient distance between an existing structure and a property line for required landscaping
 - f. Unique sites such as including vegetation that provides food or medicinal properties.
3. At the discretion of the Approval Authority (Planning Board, Staff Review Committee or City Planner), a landscape plan may be waived with the provision by owner or developer

of a fee deposited into a city fund dedicated to tree planting, care, and maintenance on city-owned property.

F. Minimum Landscaping Required

1. A minimum percentage of the total area being developed shall be landscaped in accordance with the following percentages, except where pre-existing impervious surface prevents:

Multifamily dwellings (5 or more units):	15%
Mixed-use buildings, commercial, retail and lodging use:	10%
Office and professional uses:	15%
Institutional and civic uses:	15%
Industrial and manufacturing uses:	10%

The total area of landscaping as defined above will be considered toward open space minimum requirements.

Species planted in accordance with this ordinance should adhere to the preferred planting list maintained by the University of Maine Cooperative Extension.

2. Tree and shrub requirements for multi-family, commercial, institutional and civic uses:
 - a. For every 500 square feet of landscaping required, or portion thereof, at least two (2) large trees and two (2) shrubs are required.
 - b. Four (4) small ornamental trees may be substituted for two (2) required large trees, not to exceed 50% of the required large trees.
3. Tree and shrub requirements for industrial and manufacturing uses:
 - a. For every 1,000 square feet of landscaping required, or portion thereof, at least one (1) large tree and two (2) shrubs are required.
 - b. Two (2) small ornamental trees may be substituted for one (1) required large tree, not to exceed 50% of the required large trees.
4. Each development shall provide at least two (2) different species. No more than 50% of all trees, per development, shall be of the same species. This standard applies only to trees being planted to meet requirements, not to existing trees.
5. Ground cover is required. Landscaped area that is not planted with trees and shrubs must be planted in ground cover plants, which may include grasses and lawn areas. Mulch (as a ground cover) must be confined to areas underneath plants and is not a substitute for ground cover plants.
6. The retention of existing and healthy shade trees or plantings, not identified by the State of Maine as an invasive species, shall be permitted to achieve this requirement.

7. Deciduous trees shall be a minimum of one and one-half (1 1/2) inch caliper at the time of planting. Evergreen trees shall be minimum six (6) feet high at planting. Tree spacing shall be as appropriate for the species.
8. Ground covers are low-growing vegetative materials with a mound or spreading manner of growth. Spacing is dependent on the type and size of the plant material and must be adequate to provide total coverage of the landscape area within three (3) years. Ground cover plants, other than grasses, must be at least the four (4) inch pot size at time of planting.
9. Shrubs shall be a minimum of eighteen (18) inches in height, or two (2) gallon container size, at the time of planting.
10. Stormwater treatment areas including retention and detention areas shall not be counted toward the required minimum landscaped area, unless significant landscape elements are incorporated into the design of such areas.
11. If a development proposes stormwater treatment systems within or near landscaped areas, they must show that said treatment system will not pose a risk to the effectiveness of the landscaped area, and vice versa. Low-impact design and vegetated treatment systems are encouraged whenever possible.

G. Buffers and Screening

1. Parking Lot Screening along Public Right-of-Way. Where all or a portion of a surface parking area is located within 30 feet of a public right-of-way, and is not separated from the public right-of-way by a structure, the parking area shall include a buffer area five feet in width comprising a continuous line of shrubs that achieves 80% opaque screening 30-48" in height during summer months.
2. Buffer Standards.
 - a. General. Where required, buffer areas shall comprise existing trees and vegetation, new landscaping or a combination thereof to create a dense, mixed buffer incorporating both understory and tree canopy layers. Such screening should also effectively provide screening when viewed from upper floors of surrounding properties, where applicable.
 - b. Vegetative buffers. New shrubs shall be spaced six (6) to eight (8) feet apart. Buffers between contrasting land uses may incorporate earthen berms not exceeding 4:1 slope, opaque fencing of high architectural quality, masonry wall or a combination thereof, in addition to landscape plantings. Where fencing or masonry wall is proposed as part of a buffer, less landscaping density is acceptable; however, buffers shall still include trees, shrubs and other vegetation.

Category	Industrial and Manufacturing Uses	Office and Professional Uses	Mixed-Use Buildings, Commercial Retail, and Lodging Use	Institutional and Civic Uses Low Cover	Multi-family Dwellings (5 units or more) Open Area
Buffer Depth or Width	15 feet wide along frontage of public and/or private rights-of way. 15 feet wide along property lines abutting residential uses, 10 feet wide along property lines abutting non industrial or manufacturing uses	10 feet wide along private and public rights-of-way, 10 feet wide along property lines when abutting a residential use, 5 feet wide when abutting a non-office use	10 feet wide along public or private right of way, 10 feet wide along property lines abutting residential use	15 feet wide along public and private rights-of-way, 10 feet wide along property lines abutting a residential use	5 feet wide along a public or private right of way, 5 feet wide along property lines abutting a residential use, 10 feet wide along property lines abutting a non-residential use.
Description	Shall consist of evergreen trees or tall shrubs with a minimum height of six 6 feet at planting, which will provide a 100% sight-obscuring screen within 3 years from the time of planting; or a combination of evergreen and deciduous trees and shrubs backed by 100% sight-obscuring fence	Shall consist of evergreen or a mixture of evergreen and deciduous trees with large shrubs and ground cover interspersed with the trees. A sight-obscuring fence may be required if determined by during plan review that such a fence is necessary.	Shall consist of evergreen or a mixture of evergreen and deciduous trees with large shrubs and ground cover interspersed with the trees. Where used to separate parking from streets, plantings must create a visual barrier of at least 12 inches in height at time of planting and form a solid screen 3 years after planting.	Shall consist of a mixture of evergreen and deciduous shrubs and ground cover, to provide solid covering of the entire landscaping area within 3 years of planting and to be held to a maximum height of three and one-half (3 1/2) feet.	Shall consist of trees planted with supporting shrubs or ground cover. Each landscape area shall be of sufficient size to promote and protect growth of plantings, with a one hundred 100 square foot minimum area and no dimension less than 5 feet.

- c. Parking areas. Landscaping shall be incorporated into the development of surface parking to reduce adverse environmental and aesthetic impacts, to shade pavement to reduce heat island effect and to screen parking areas from public view. Plant materials shall be selected for appearance, durability, and tolerance to salt.
 - i. Landscaping that abuts areas of vehicular use shall be adequately protected and separated from vehicles. Protection should take the form of physical or visual separation, such as curb stops, bollards, or continuous curbing. Protection shall be designed with adequate visibility and durability in order to withstand normal snow plowing operations.
 - ii. Landscaped islands shall be curbed and a minimum of eight (8) feet in width, not including curbing. The incorporation of bio-retention into landscaped islands is strongly encouraged.
- d. Snow storage. Snow storage areas may be located in landscaped areas provided that appropriate landscape materials are selected which can withstand such snow storage. Snow storage shall not be located in a stormwater treatment measure, shoreland zoning setback buffers, or where it would adversely impact the functionality of bioretention or other stormwater management measures.

3. Installation and Maintenance of Plantings.

- a. No plant shall be moved after the bud break. Planting periods are between April 1st and July 1st and/or September 1st and November 1st.
- b. Tree planting and other landscaping for subdivisions that cannot be installed prior to the release of the performance guarantee must be insured by a defect bond as described in [Article 13 of the City Land Use Code](#).
- c. All bare soil areas shall be vegetated and/or mulched prior to the issuance of a Certificate of Occupancy.
- d. New vegetation that shows signs of construction damage within a one-year period following construction, including but not limited to bark damage or excessive root damage, grade changes other than those originally indicated in the approved grading plan, soil compaction due to heavy equipment traversing closely, or general decline due to mechanical or natural conditions shall be rejected and must be replaced prior to the release of any defect guarantee.
- e. Landscaping required in accordance with the provisions of this ordinance or any addition or amendments to this ordinance, or in accordance with the provisions of any previous code or ordinance of the city, the landscaping shall be permanently maintained in such a manner as to accomplish the purpose for which it was initially required. All landscaping which, due to accident, damage, disease, lack of maintenance, or other cause, fails to show a healthy appearance and growth shall be restored, or replaced, within one year of initial installation, with the same type of landscaping elements and in the same location as required in the approved landscape plan.

- f. Slopes with between a 5% and 50% grade change shall incorporate installation of a mixture of vegetation, organic mulch and/or erosion control seed mix. Stabilization of slopes greater than 50% must incorporate biotechnical and/or structural methods including but not limited to terracing rip rap or retaining walls in addition to vegetation.

H. Incentives

To help facilitate the goals of the 2023 Biddeford Climate Action Plan, development review applications may receive modifications to density, setback, lot size, and/or height requirements if the development meets all requirements of the landscaping plan as well as one or more the following additional benefits:

1. Ensure at minimum 50% of the plantings are pollinator friendly, drought resistant and/or invasive pest tolerant.
2. Use open space areas for food production such as greenhouses, community gardens, or food plots.
3. Provide public access easements, conservation easements, or public access trails on the site.
4. Provide landscaping beyond the requirements of this ordinance, to the satisfaction of the Approval Authority.

I. Violations / Enforcement [Roby Fecteau to advise.]

To ensure all new landscaping meets the standards set herein, 125% of the cost of landscaping will be held in escrow for one year as a performance guarantee to ensure plantings are healthy and thriving.

THE BUFFER HANDBOOK PLANT LIST



Originally Developed by:

Cynthia Kuhns, Lake & Watershed Resource Management Associates

With funding provided by U.S. Environmental Protection Agency and Maine Department of Environmental Protection, 1998. Revised 2001 and 2009.

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This publication was originally developed by **Cynthia Kuhns** of Lake & Watershed Resource Management Associates. Substantial assistance was received from **Phoebe Hardesty** of the Androscoggin Valley Soil and Water Conservation District. Valuable review and advice was given by **Karen Hahnel** and **Kathy Hoppe** of the Maine Department of Environmental Protection. **Elizabeth T. Muir** provided free and cheerful editing and botanical advice.

2009 Revision:

This revision attempted to include more native species and to remove species that are now known to be or suspected of being invasive or which are highly aggressive.

Revision by **Kristin Feindel** of the Maine Department of Environmental Protection with valuable review by **Don Cameron** of the Maine Natural Areas Program, **Lois Berg Stack** of the University of Maine Cooperative Extension, and **Phoebe Hardesty**, formerly of Androscoggin Soil and Water Conservation District.



Please read this section before choosing plants for your buffer. It is important to understand how plants were selected for this plant list and to understand the meanings of the various terms and abbreviations used in the list.



SELECTION OF PLANTS FOR THIS LIST

- Plants were selected that are low-maintenance, long-lived, hardy and sturdy. A few short-lived plants were included if they spread or self-seed easily. Low-maintenance means, for the most part, that plants do not need pruning, staking, mulching or regular dividing. In some cases, these activities may improve the form of the plant but not affect its ability to function in a buffer and therefore can be performed at the discretion of the land owner. Generally, buffer plants should be sturdy and, once established, able to hold their own against weeds and invasive plants. Plants that require little competition to thrive or special care were not included on this list. Following is a brief summary of the possible benefits of light maintenance:

Pruning Pruning can sometimes help fill out and invigorate a scraggly shrub but pruning to create a tight, landscaped appearance as is done with many evergreens can limit the plant's ability to absorb rain and make them vulnerable to insects, disease and drought.

Staking While staking is rarely required, some of the taller plants included on this list may benefit from staking if they are grown alone or in the open. In a buffer, there should be enough other vegetation to keep things upright. Your site will help determine this - plants in windy locations may need staking, but you may want to avoid less durable plants if you have a windy site; check with the nursery for recommendations. If you do use stakes, always remove them one year after planting.

Mulching Many perennials require winter mulching to protect from freezing and thawing. Most of the plants on this list are hardy enough to not need winter mulch, provided they are not grown beyond their hardiness limit. Here again it can depend on the exposure of your site. You should ask the nursery about this at the time of purchase. You may also want to use mulch when a bed is first planted. The mulch protects bare soil, and absorbs many times its weight in water – providing slow release of moisture over a period of days. Once the plants are well established and the buffer has filled out, mulch should not be necessary.

Dividing Plants that need regular dividing to maintain vigor were not included on this list. They can be used in a buffer if you are willing to maintain them and keep buffer disturbance to a minimum in the process. Plants such as daylily and iris can form large clumps that benefit from dividing, however, for most varieties, dividing need only be done every 5 to 10 years. Daylilies will continue to thrive without dividing but will produce fewer flowers. Some irises can go indefinitely without dividing and others will die from the center of the clump out. Keep this in mind when selecting varieties for your buffer.

- Many sources were used in the preparation of this plant list. Occasional discrepancies were found in maximum size and hardiness zone. Every attempt was made to provide accurate information but size and hardiness zone should always be double-checked at the nursery.
- Some plants (flowers in particular) were included simply because they add beauty, are good space fillers or attract birds and butterflies. Some of these die back earlier than others and therefore do not provide as much buffering capacity so should not be planted exclusively. On the other hand, some of these emerge early in the spring and provide cover before other plants get started. Virginia Bluebells, Oriental and Hardy Lilies and many bulbs fall into this category.
- For the most part, plants that are hard to come by were left out even if they would be good in a buffer. This was done to avoid frustration on the part of someone looking in vain for a particular plant and to avoid plants being dug from the wild where they may be in limited supply or hard to identify. Examples of these are; Balsam Poplar and Hog Peanut. These and others can be used in buffers if a source can be located. On the other hand, some plants that are hard to find were included because they are native and would be very beneficial in tough situations. Examples of these are; Sweet Fern, Sweet Gale and some ferns. Often local nurseries will have locally native plants that are not available at the larger, franchised nurseries.
- Many of the plants on this list have been cultivated into numerous varieties and new ones are being created yearly. Only well-established varieties or those particularly suited to buffers are mentioned specifically in this list. Chances are, you will have several choices of varieties at the nursery. In choosing, keep in mind the qualities that make plants good for buffers (low-maintenance, long-lived, hardy and sturdy).

PLANT LIST ORGANIZATION & INFORMATION

- The plants are listed in two formats; a chart and a narrative list. The chart includes the zone, sun and soil requirements for each plant and can be used for quick reference to identify which plants are suited to your site. Once you know which plants can grow in your location, you can go to the narrative list for details about each plant (size, flowers, uses etc.) and choose the ones you want in your buffer.
- Within each format, the plant list is divided into three major categories; trees, shrubs and ground layers.
 - Trees are further divided into deciduous and evergreen categories.
 - Shrubs are divided into three categories based on height; large shrubs/small trees, medium shrubs and small shrubs. Each of these groups is further divided into deciduous and evergreen categories.
 - Ground layers are divided into four categories based on type of plant; perennial flowers & herbs, ferns, grasses and vines.
- Within each subcategory, plants are listed alphabetically by the name most often associated with that plant in this area. Sometimes this is the 'common name' such as 'daisy' or 'balsam fir' and other times it is the Latin name or 'scientific name' such as 'spirea' or 'pachysandra'. This name is followed by the Latin name in parentheses and italics. The Latin name is universal and can be used anywhere to describe a plant. Common names vary from region to region, even sometimes quite locally. For plants with several well-known common names, one is used first and the others are listed after the Latin name. Not all names are listed as some plants have numerous common names!
- The plant sizes that are given are the maximum size (especially for trees). There will be much variation in how large a plant gets depending on the particular variety, the zone and specific location where it is planted. Check with your nursery for expected sizes in your area.
- Many plants come in standard and dwarf varieties. Except for trees, when this is the case for a plant on this list, the plant is listed in the largest size category that it occurs and an asterisk is shown on the chart to indicate that it is also available in dwarf form(s). For instance, lilac is listed only in 'small trees/large shrubs' even though varieties can be found in smaller sizes. For trees, the standard form and the dwarf form are listed in separate categories. For instance, balsam fir is listed in 'trees' and dwarf balsam fir is listed in 'small shrubs'.
- Tolerances for things like salt, drought, flooding etc. are given for plants where these tolerances are known for certain. There may be other plants with these tolerances as well. Always check with your nursery supplier for this information.
- The cold hardiness zones are shown in bold at the end of each description. Zones 3, 4 and 5 occur in Maine. The zone given is the coldest one tolerated, so if a plant is shown as zone 3, that means it will also tolerate zones 4 and 5. If you are on the boundary of two zones, it is best to select plants hardy in the colder zone. The zone map provided with this list is general and you should check with the local nursery for plant hardiness. Also, hardiness

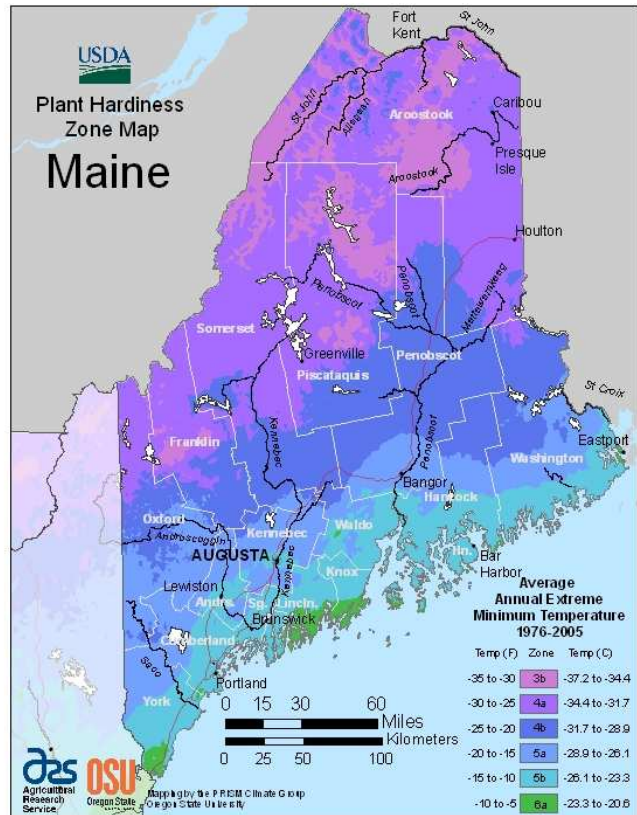
zones are general, and microclimates within the zones may be warmer or colder than the zone indicates. Try to purchase plants that have been grown locally rather than ones brought in from far away. The locally grown ones will be hardier.

TERMS AND ABBREVIATIONS

- **Sun or Full Sun** Generally this means 6 or more hours of direct sun in a day.
- **Part-sun** Generally means less than 6 hours of direct sun or a full day of dappled sunlight.
- **Shade** Very little to no direct sun, especially through the middle of the day.
- **Moist** Average soil conditions, not wet, not dry. Able to retain water long enough for plants to use but not soggy.
- **Wet** Has standing water part of the time or is boggy and damp most of the time.
- **Dry** Very little moisture, often sandy soil. Dries out quickly after rain.
- **Deciduous** Deciduous plants lose their leaves or needles every winter and regrow them in the spring. Larch is the only conifer in this area that is deciduous.
- **Semi-evergreen** These plants may or may not lose all or some of their leaves or needles in the winter depending on their hardiness and the local conditions where they are grown.
- **Evergreen** These plants do not lose their leaves or needles in the winter. There may be some annual 'shedding' of old needles (as in pine) but the entire plant does not go bare. These plants continue to grow and feed throughout the winter and need sunlight and water throughout. Evergreen plants like rhododendrons need protection from too much sun and wind in winter to keep their leaves from drying out.
- **Dwarf** A smaller version of a plant. Some trees and shrubs have been bred to stay small while still retaining many of the features of the full-size form.
- **Cultivated** These plants have been developed from other plants to have certain qualities. They are not found naturally occurring unless they have escaped from local gardens into the surrounding area. Generally they are not as hardy or valuable to wildlife as naturally occurring plants. However, many desirable qualities can be found in these plants such as disease resistance and increased flower displays.
- **Naturally-occurring** These are plants that have been introduced from elsewhere but have become well-established in the natural landscape. They generally do well and fit in well with the other plants in the area.
- **Native** These are plants that are believed to have been in place in the landscape prior to European settlement. They have been long-established as part of the natural plant, animal and soil system in the area. Plants that are native to this area are indicated as "Native" in the description and marked with an "X" in the native column of the table, whenever this information is known. If a plant is listed as "(Native)" in the description or marked with an

“(X)” in the native column, that indicates there are notes in the description concerning the status of certain species.

- **Multi-stemmed** This usually refers to shrubs and some small trees. Over time numerous stems arise in the same area as the original stem, forming a large clump. These are often good for birds and wildlife and erosion control.
- **Ground Cover (G/C)** These are plants that will spread to cover a large area either by reseeding, through underground rhizomes or by tip rooting. They are often good for erosion control and for filling in difficult areas.
- **Zone** This refers to the cold hardiness of plants. The country is divided into zones based on the average annual minimum temperatures. The cold tolerance of plants is indicated by the coldest zone in which they will survive. See map to the right for hardiness zones in Maine.



GENERAL TREE & SHRUB PLANTING GUIDELINES

- Choose plants suitable to your location; sun, moisture, wind and zone.
- Space plants according to the instructions or nursery advice, keeping in mind the eventual spread of the tree or shrub. Things may look too far apart at first, but within a few seasons will spread and fill the space.
- Dig a hole 2-3 times the width of the pot or rootball; you want the roots to spread out more than down so the wider the better.
- Dig the hole to the same depth as the pot or rootball.
- Keep the rootball intact while handling and planting. Trim off broken roots and long, trailing roots that won't fit in the hole without bending. Do not over prune roots. Dig a bigger hole if there are a lot of roots that won't fit.
- If the plant is root-bound (roots are in a dense, tangled mat) loosen the roots with your fingers or use a knife to make vertical cuts around the rootball to allow roots to branch out.
- Place the rootball so that it is level or slightly above the surrounding soil unless it comes with other instructions.

- In areas with very heavy or wet soil, be sure to consult with nursery personnel on how best to establish new plants in these areas.
- Do not add materials (compost, manure or other soil) to the soil unless it is very poor and you are planting something that needs better soil. If that is the case, incorporate a maximum of 25% of organic matter by volume. In the long run it is better to plant things that can tolerate the existing conditions rather than trying to improve a large area of soil.
- Place the rootball in the hole and back-fill ½ way, flood with water to eliminate air pockets and finish filling the hole. Pack soil firmly but not too heavily. Leave a depression around the plant and flood with water again.
- Do not fertilize the first year. Most trees and shrubs do not need fertilizer at all. Fertilizer can speed growth and result in weak, poorly rooted plants. If fertilizer is used, use it sparingly and only for a year or two after the plant is established. Some plants (rhododendrons etc.) may need an acid booster if planted in non-acidic soil. In any event, apply fertilizer so that it cannot wash into a lake or stream.
- The first season, keep soil moist but not soggy. It is better to water deeply now and then (approximately once a week) rather than frequent, light waterings. It takes about 5 gallons to a 3 foot shrub to saturate the soil. Use more if the soil is particularly dry or sandy and less if the soil is heavy or wet. Take care not to wet the leaves or needles to help prevent disease. Proper watering the first year is the most critical factor to success.
- Do not stake plants unless they will not stay upright in a moderate wind. Use a broad, soft material that will not damage the bark. Remove bindings as soon as the plant can support itself and do not let the bindings get tight.
- Do not wrap trunks except for the first few winters to prevent rodent damage. Be sure to remove wrapping in the spring!
- Mulch with 2 inches of bark or cardboard, taking care not to let the mulch touch the stems by pulling the mulch back 6" from the plant stems.
- Remove dead branches with good, sharp pruners but do not prune vigorously until the second season, if at all. Ask the nursery for advice on pruning at planting time. The need for pruning depends on the age of the plant and how long it has been potted or balled.
- In windy or sunny locations, evergreens may benefit from a wilt-proofing spray applied in the fall to prevent winter desiccation. In addition, some plants may need burlap or wooden frames to protect them from winter wind, sun and snow loads, especially when they are small. However, once a tree or shrub gets large, this is not practical. It is better to choose plants tolerant of these conditions. Ask the nursery how long a plant will need protecting and choose according to what you can manage.
- Plant bare-root plants as soon as possible. Keep the roots moist until planting and keep plant lightly covered and in a cool, shady location.

TIPS FOR PLANTING PERENNIALS

- Generally, perennials should be planted at the same depth as they were in the pots. Carefully spread roots and plant in well-prepared soil. Take the time ahead of planting to prepare a good bed and avoid having to disturb the plants later.
- Perennials should not need fertilizer unless they are planted in a poor location or fertilizer is needed for proper flowering. Once again, it is better to choose plants suitable to your location rather than try to improve large areas of soil. The soil should be loosened and weeded and compost or manure should be well worked into the soil prior to planting. Plants will benefit from annual or occasional side-dressing with compost. Care must be taken to prevent compost and other material from washing into lakes or streams.
- The success of perennials depends on adequate watering and weeding the first few seasons. Once established, many perennials require very little maintenance, especially if they are part of a natural planting.

INVASIVE PLANTS TO AVOID

Non-native, invasive plants The plants listed below are non-native plants either known or suspected to be invasive in parts, if not all, of Maine. They spread rapidly by seeds, underground rhizomes or suckers and can take over an area, eliminating the natural vegetation and therefore adversely altering the natural habitat. Once established, many of these plants are hard to eradicate. They should be avoided even if they are available through nurseries.

<u>INVASIVE SPECIES – DO NOT USE</u>	
<ul style="list-style-type: none"> ◆ Autumn olive ◆ Black locust ◆ Black swallowwort ◆ Buckthorn (smooth & common) ◆ Burning bush (winged euonymus) ◆ Common reed ◆ European alder ◆ Garlic mustard ◆ Japanese barberry ◆ Japanese knotweed ◆ Japanese stilt grass 	<ul style="list-style-type: none"> ◆ Lesser celandine ◆ Mile-a-Minute weed ◆ Multi-flora or Rambler rose ◆ Non-native honeysuckles ◆ Norway maple ◆ Oriental or Asiatic bittersweet ◆ Porcelainberry ◆ Purple loosestrife ◆ Rugosa rose ◆ Small-flowered tickle-grass

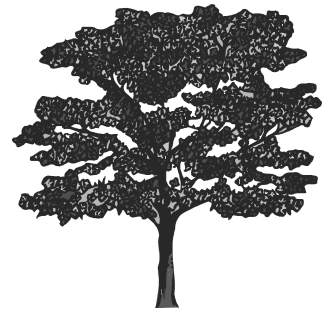
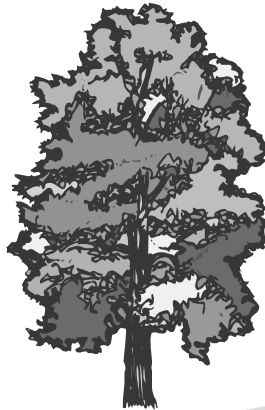
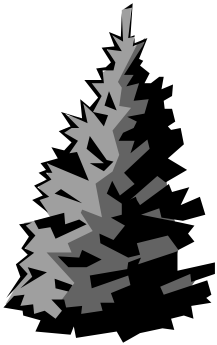
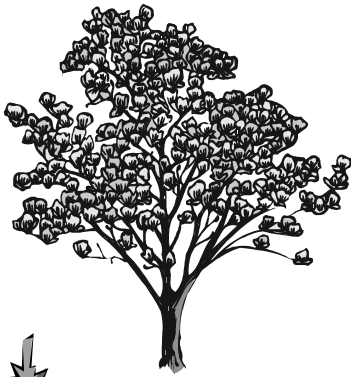
In addition, currant and gooseberry (*Ribes spp.*) are alternate hosts for the white pine blister rust and are illegal to grow in most of Maine.



TREES

30 TO 100 FEET IN HEIGHT

Trees form the top layer of leaves and branches in a buffer (the *canopy*). Leaves, needles and branches slow the impact of rain drops while the deep root systems provide soil stability and water uptake. Trees are the backbone of a wooded buffer.





TREES
30 TO 100 FEET IN HEIGHT

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	Sandy	Native
Deciduous									
Basswood	3	X	X	X		X			X
Beech	3	X				X			X
Bigtooth Aspen	4	X				X	X	X	X
Black Cherry	3	X				X			X
Black Gum	5	X	X			X			X
Black Willow	4	X			X	X			X
Box Elder	4	X	X		X	X	X		X
Cottonwood	4	X				X			
Gray Birch	5	X				X			X
Green Ash	3	X	X		X	X	X		X
Honey Locust	5	X			X	X			
Katsura Tree	5	X	X			X			X
Littleleaf Linden	3	X				X	X		
Mountain Ash	3	X					X	X	X
Northern Red Oak	3	X				X	X		X
Paper Birch	3	X				X	X		X
Pin Cherry	3	X				X			X
Quaking Aspen	3	X				X	X		X
Red Maple	3	X	X		X	X	X		X
River Birch	4	X			X	X	X		
Silver Maple	3	X			X	X			X
Sugar Maple	3	X				X			X
Swamp White Oak	4	X			X	X			X
White Ash	3	X				X			X
White Oak	4-5	X				X			X
Yellow Birch	3		X	X		X			X
Evergreen									
Austrian Pine	4	X				X	X		
Balsam Fir*	3	X	X		X	X			X
Black Spruce	3	X			X	X			X
Colorado Blue Spruce	3	X				X			
Hemlock*	3	X	X	X		X			X
Jack Pine	3	X					X	X	X
Japanese Black Pine	5	X				X	X	X	
Larch (Tamarack)	3	X			X	X			X
Norway Spruce	3	X				X	X		
Red Pine	3	X				X	X	X	X
White Cedar*	3	X	X		X	X		X	X
White Pine	3	X	X	X		X	X		X
White Spruce	3	X	X			X	X		X

* also available in dwarf forms



TREES
30 TO 100 FEET IN HEIGHT

DECIDUOUS



Basswood (*Tilia americana*) Also known as Linden. Grows 60 to 80 feet. A lush, ornamental shade tree with large leaves and fragrant white flowers in summer. Sun to shade. Rich, moist soil. Not tolerant of salt. **Zone 3 Native**

Beech (*Fagus grandifolia*) Grows to 70 feet. Has a short trunk with a wide, rounded crown and smooth bark. Attractive, light-green leaves create dense shade. Leaves hang on after turning yellow to brown in the fall. Full sun. Rich, moist soil. Good for birds. **Zone 3 Native**

Bigtooth Aspen (*Populus grandidentata*) Grows to 60 feet with a narrow, round-topped crown. Leaves flutter in the wind like quaking aspen. Rapid growth. Full sun. Does best in rich, moist, sandy soil but tolerates drier soils. Good for birds. **Zones 3-4 Native**

Black Cherry (*Prunus serotina*) Grows to 60 feet. Full sun. Moist soil. Has interesting black bark and white flowers in spring. Best results in establishing are by planting 1-year or older nursery grown seedlings. Good source of food for wildlife. **Zone 3 Native**

Black Gum (*Nyssa sylvatica*) Grows to 50 feet. Excellent ornamental plant for its straight bole, shapely crown and attractive yellow-orange autumn foliage. The simple, alternate leaves are leathery, and densely clustered at the branchlets. Full to part sun. Moist soil. **Zone 5 Native**

Black Willow (*Salix nigra*) Grows to 45-65 feet. Full sun. Wet to moist soil. Tolerates wet soils. Has open crown often with several trunks growing out at angles from one root. Found in wet soil along streams and at the margins of ponds and lakes. Leaf blades up to 5 inches long, narrow and tapering to an elongate tip. Bright yellow-green twigs bear yellow-green catkins. Twigs can cause lawn litter. **Zone 4 Native**

Box Elder (*Acer negundo*) Grows to 50 feet with a 30 foot spread. Short trunk and stout branches provide a deep, broad crown. Compound leaves. Rapid growth. Full to part-sun. Moist soil. Found naturally along stream and lake edges. Used as an ornamental in parks and along roads. **Zone 4 Native**



Cottonwood (*Populus deltoides*) Grows to 80 feet with a high, pyramidal crown. Large leaves. Cottony seeds evident in late spring. Rapid growth. Full sun. Moist soil. Found in rich, moist soil near streams and lakes. Good for grouse. Branches may break in storms. **Zone 4**

Gray Birch (*Betula populifolia*) Grows to 20-30 feet. Does well in poor soils. The white, non-peeling bark becomes darker with age. Dark-green leaves turn yellow in fall. Its trunks are so flexible that when weighted with snow, the upper branches may bend to the ground without breaking. Good for naturalizing. Full sun. Moist soil. **Zone 5 Native**

Green Ash (*Fraxinus pennsylvanica*) Grows to 60 feet. Attractive shade tree. Compound leaves. Rapid growth. Full to part-sun. Dry to wet soil. Tolerates flooding and salt. Found along rivers and streams. Yellow fall color. **Zone 3 Native**

Honey Locust (*Gleditsia triacanthos*) Grows to 80 feet (50 in Northern New England) with a broad, flat-topped crown. Compound leaves are graceful and lacy. Long, interesting seed pods. Thorns on trunk and branches. Full sun. Moist, fertile soil. Tolerates poor drainage and salt. Yellow fall color. **Zones 4-5**





Katsura Tree (*Cercidiphyllum japonicum*) Grows to 60 feet with a 30 foot spread. Nice form. Used as an ornamental. Bluish-green leaves are orange and smell spicy in fall. Full sun. Moist, well-drained soil. **Zones 4-5**

Littleleaf Linden (*Tilia cordata*) Grows to 50 feet with a 35 foot spread and an upright, oval crown. Dark-green leaves and fragrant, yellow flowers in early summer. Full sun. Adaptable to a variety of soils and conditions. **Zone 3**



Mountain Ash (*Sorbus alnifolia & aucuparia*) These are similar to ornamental mountain ashes. Grow from 35 to 50 feet with a 20 foot spread (larger than the American Mountain Ash). Fine, compound leaves turn from green to varying shades of brilliant yellow to red in the fall. Clusters of white flowers in spring, followed by red berries in fall. Full to part-sun. Moist soil. Good for birds. **Zone 3**

Northern Red Oak (*Quercus rubra*) Grows to 70 feet with a similar spread. A 'grand tree' with reddish-brown bark and dark-green leaves. Leaves are brown and persistent into late fall. Rapid growth. Full sun. Moist to dry soil. **Zone 3 Native**

Paper Birch (*Betula papyrifera*) Also called White Birch. Grows to 70 feet with a 35 foot spread and an irregular, pyramidal crown. Often found in clumps of 3 or more and used ornamentally. Interesting snow-white bark that peels horizontally. Found along lakes and streams. Tolerates occasional flooding and drought. Rapid growth. Full sun. Does best in moist, well-drained soil. Good for birds. **Zone 3 Native**

Pin Cherry (*Prunus pensylvanica*) Grows to 25-30 feet. Full sun. Moist soil. Also known as fire cherry and bird cherry. Fine-textured, bright red branches; reddish to yellow-orange, mature bark; flat-topped clusters of white flowers; and bright red fruit. Adaptable, fast growing tree that tolerates poor soil. **Zone 3 Native**

Quaking Aspen (*Populus tremuloides*) Also called Popple. Can grow to 60 feet but usually less. Narrow, rounded crown. Nice yellow to gold fall color. Leaves quiver in the breeze, making a soft rustling sound. Rapid growth. Short-lived. Full sun. Moist to dry soil. Tolerates a wide variety of conditions. Tolerates heat and some salt. Not flood tolerant. Good for wildlife and birds. Preferred food of beavers. Likely to lose trees if active beavers in the area. Found in clearcuts, after fires and in old fields. **Zone 3 Native**



Red Maple (*Acer rubrum*) Also known as Swamp Maple. Grows to 60 feet with a 35 foot spread. Nice early red spring flowers and good red fall color. Used as an ornamental. Rapid growth. Full to part-sun. Prefers moist, acid soil but tolerates a wide variety of conditions. Tolerates wet soil and flooding. Not salt tolerant. Found along swamps and lakes. **Zone 3 Native**

River Birch (*Betula nigra*) Also can be found in a dwarf variety. Grows to 70 feet with a 50 foot spread. Short trunk is often divided into several arching limbs forming an irregular crown. Gray to brownish-red bark is attractive in winter. Full sun. Best in moist soil. Tolerates poor drainage and flooding. Found along river and lake banks. **Zones 4-5**

Silver Maple (*Acer saccharinum*) Grows to 70 feet or more with a 45 foot spread. Attractive tree with graceful, arching branches. Bright-green leaves have a silvery-white underside. Good yellow fall color. Rapid growth. Full sun. Best on moist, well-drained soil but tolerates several weeks of flooding. Found along river banks and bottom lands. Used ornamentally. Good for birds and wildlife. **Zone 3 Native**

Sugar Maple (*Acer saccharum*) Also known as Rock Maple. Grows to 80 feet or more with a 40 foot spread. Good shade tree with classic shape if grown in the open. Excellent yellow to red fall color. Full sun best but tolerates some shade. Moist, well-drained soil. Does not tolerate wet or compacted soil. Sensitive to salt. Found in upland areas throughout New England. Sap can be used to make maple syrup. **Zone 3 Native**





Swamp White Oak (*Quercus bicolor*) Grows to 60 feet with similar spread. Produces quantities of acorns. Poor fall color. Full sun. Moist to wet soil. Scraggy, peeling branches make it less appealing as an ornamental but its value lies in its tolerance of swampy, poorly-drained conditions. Good for wildlife. **Zones 4-5 Native**

White Ash (*Fraxinus americana*) Grows to 80 feet. A tall, slender tree with good yellow fall color. In the open the tree can become quite spreading. Compound leaves. Rapid growth. Full sun. Best on moist, well-drained soil but tolerates poor drainage and heavy soil. Often found growing near water. Good for birds. **Zone 3 Native**

White Oak (*Quercus alba*) Full sun. Moist soil. Grows to 60-70 feet. Large, stately tree. Acorns are food source for wildlife. Grows on sandy land, gravelly ridges, and moist bottom lands, but makes the best growth on rich, heavy, upland soils. Transplant when young. **Zone 4-5 Native**

Yellow Birch (*Betula alleghaniensis*) Grows to 80 feet with a 50 foot spread. Attractive golden, peeling bark on older specimens. Part-sun to shade. Moist soil. Found near streams. Good for birds. **Zone 3 Native**



EVERGREEN

Austrian Pine (*Pinus nigra*) Grows to 100 feet with a 30 foot spread. A large, wide, dense tree with long, dark-green needles. Branches occur down to the base of the trunk. Large, interesting cones. Full sun. Moist to dry soil. **Zone 4**

Balsam Fir (*Abies balsamea*) Grows to 50 feet with a 25 foot spread. Straight, conical tree with horizontal branches. Typical Christmas tree shape. Short, dark-green, fragrant needles. Small, light-brown cones. Also available in dwarf forms. Sun to part-sun. Prefers cool, moist, upland soil. Good for wildlife and birds. **Zone 3 Native**



Black Spruce (*Picea mariana*) Grows to 50 feet. A very narrow, straight tree with thin, somewhat pendulous branches. Short, blue-green needles and small cones. Full sun. Moist soil. Tolerates poor, poorly-drained, swampy conditions. Good for birds and small wildlife. **Zone 3 Native**

Colorado Blue Spruce (*Picea pungens*) Many varieties available with different heights. Grows to 100 feet with a 20 foot spread. A tall, narrow tree with dense, silver-blue to blue-green foliage. Needles are medium-length and sharp. Branches occur in regular whorls. Very ornamental. Full sun. Prefers moist soil but will do well in dry areas also. Good for birds. Native to the Rockies. **Zone 3**

Hemlock (*Tsuga canadensis*) Grows to 80 feet with a 30 foot spread. Large, irregular, pyramidal tree. Small, deep-green needles with a loose, feathery appearance. Graceful appearance. Small, interesting cones. Also available in dwarf forms. Hemlock roots are strong and can grow great distances, so plant far away from septic tank and septic field (they have been known to cause trouble with septic systems from at least 15 feet away). Sun to shade. Does best in cool, moist, well-drained soil. Tolerates shade and some flooding. **Zone 3 Native**

Jack Pine (*Pinus banksiana*) Also known as gray pine. Grows to 50-60 feet. Full sun. Drought resistant. Grows on sandy, rocky, shallow acid soils. Useful for windbreaks or mass plantings in sandy soil. **Zone 3 Native**



Japanese Black Pine (*Pinus thunbergii*) Can grow to 80 feet but usually only to 50. Irregular open habit with wide-spreading, horizontal branches. Bright-green needles and attractive brown cones. Full sun. Sandy, acid soil. Salt tolerant. Drought tolerant. Good for shore plantings. **Zone 5**

Larch (*Larix laricina*) Also called Tamarack and Hackmatack. Grows to 65 feet. A narrow, upright open tree with horizontal branches and graceful, sweeping twigs. Fine, light-green needles with a lacy appearance turn yellow in fall and drop off (not really an evergreen). Full sun. Prefers moist soil but tolerates poor, wet soil and flooding. Found in wetlands. **Zone 3 Native**

Norway Spruce (*Picea abies*) Grows to 100 feet. Tall, dense, attractive, conical tree with drooping branches and branchlets. Can be 30 feet across at the base. Makes an excellent windbreak. Many varieties available. Full sun. Moist soil. Good for birds and wildlife. **Zone 3**



Red Pine (*Pinus resinosa*) Also called Norway Pine. Grows to 80 feet. Large, handsome, straight tree with horizontal branching, often limited to the top third of the tree in older specimens. Long, dark-green, stiff needles and nice cones. Interesting, reddish bark. Rapid growth. Full sun. Best in dry, sandy soil. Tolerates poor soil. Found on dry, rocky ridges. First discovered near Norway, Maine. **Zone 3 Native**



White Cedar (*Thuja occidentalis*) Also called Arbor Vitae. Grows to 60 feet and 25 feet across at the base. A dense, oval or pyramidal tree with flat, green, aromatic foliage. Makes a good hedge and windbreak. Can be sheared but has an attractive form on its own. Many varieties available, including dwarf forms. Sun to part-sun. Moist soil best. Tolerates dry, sandy to wet soils. Tolerates flooding and occasional drought. Found in wet soils and swampy areas. Good for birds and wildlife. **Zone 3 Native**

White Pine (*Pinus strobus*) Grows to 100 feet with a 40 foot spread. A large, open tree with horizontal branching. Branches occur to the base in open-grown specimens. Long, soft, blue-green needles give a softer overall appearance than Red Pine. Several varieties available. Can be pruned to hedges and windbreaks. Rapid growth. Sun to part-sun. Moist soil best but tolerates dry soil. Does not tolerate salt or flooding. Good for birds and wildlife. **Zone 3 Native**

White Spruce (*Picea glauca*) Grows to 65 feet. A large, conical tree with horizontal branching and dark-green to bluish foliage. Broader and fuller than black spruce. Slow growth and a somewhat disagreeable odor when needles are bruised. Makes a good windbreak. Several forms available. Full sun. Moist soil. Tolerates a variety of conditions. Common on lake shores. Good for birds and wildlife. **Zone 3 Native**

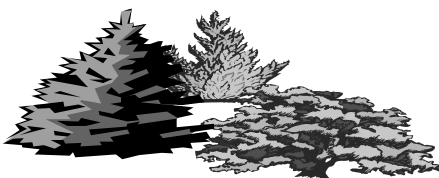
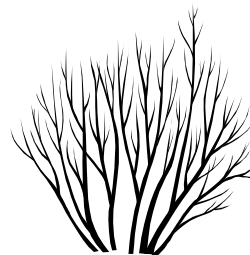
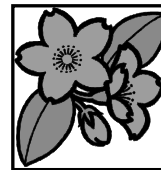
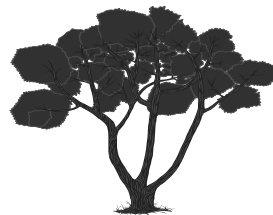
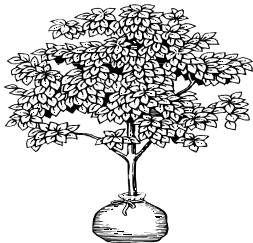
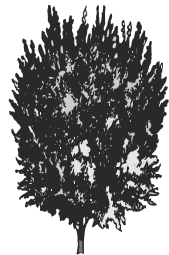




SHRUBS

UP TO 30 FEET IN HEIGHT

The shrub layer includes everything from small trees (the forest understory) to low, sprawling, ground cover shrubs. It is a vital part of any buffer, offering a wide variety of sizes and shapes, beauty and vast bird and wildlife value. Shrubs can be found to fit any situation.





**SMALL TREES/LARGE SHRUBS
12 TO 30 FEET IN HEIGHT**

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	Sandy	Native
Deciduous									
American Hornbeam	4		X	X		X	X		X
American Mountain Ash	3	X	X			X			X
Blackhaw	4		X			X	X		X
Canada Plum	3	X	X	X		X			X
Chokecherry	3	X	X			X			X
Cockspur Thorn	3	X				X			X
Common Witchhazel	4	X	X	X		X			X
Crabapple*	4	X				X	X		
Eastern Wahoo	5			X		X			
Hawthorn*	4	X				X	X	X	(X)
Hop Hornbeam	3	X	X	X			X		X
Kwanzan Cherry	5	X				X			
Lilac*	3-4	X				X	X		
Mountain Maple	3	X	X			X			X
Nannyberry	3	X	X	X		X	X		X
Northern Arrowwood	3	X	X			X			X
Pagoda Dogwood	4	X	X	X		X			X
Purpleosier Willow	3	X	X	X	X	X			
Pussy Willow	3	X			X	X			X
Scarlet Elder	3	X				X			X
Serviceberry*	3-4	X	X			X	X		X
Speckled Alder	3	X	X	X	X	X			(X)
Staghorn Sumac	3	X	X	X			X		X
Striped Maple	3		X	X		X			X
Evergreen									
Eastern Redcedar*	4-5	X	X	X	X	X	X	X	X
Fraser Fir	4	X	X			X	X		
Japanese Yew	3	X	X	X		X	X	X	
Mugo Pine*	3	X	X	X		X			

* also available in dwarf forms



**SMALL TREES/LARGE SHRUBS
12 TO 30 FEET IN HEIGHT**

DECIDUOUS



American Hornbeam (*Carpinus caroliniana*) Also known as Ironwood. Grows to 30 feet with a round-topped crown. Has a short, twisted trunk. Good understory tree. Orange fall color. Part-sun to shade. Grows in moist rich soil along streams and swamps. Adaptable to other soils. **Zone 4 Native**

American Mountain Ash (*Sorbus americana*) Grows from 15 to 30 feet high in cool woods and along river banks. Has fine, attractive foliage and yellow to red fall color. Full sun. Tolerates sandy soil and some drought. Good for birds. **Zone 3 Native**

Blackhaw (*Viburnum prunifolium*) Grows 12 to 15 feet with similar spread. The short trunk is often crooked. Found on dry, rocky hillsides and in thickets. Has round, white flower clusters, followed by black fruit. Maroon fall color. Part-sun. Moist to dry soil. *Blackhaw is moderately susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 4 Native**

Canada Plum (*Prunus nigra*) Grows from 12 to 25 feet, often with a distorted shape. Found in roadside thickets and edges of woods. Has early, white flowers and edible fruit. Dark bark is attractive in winter. Sun to shade. Moist soil. **Zone 3 Native**

Chokecherry (*Prunus virginiana*) Grows to 25 feet, often in a multi-stemmed clump. An open shrub with white flower clusters, followed by small, red, edible fruit. Found along roadsides and river banks, in abandoned fields and rich woods. Sun to part-sun. Adaptable to most soils. Good for birds. **Zone 3 Native**



Cockspur Thorn (*Crataegus crus-galli*) Grows to 30 feet. Full sun. Moist soil. Has glossy green leaves, 2" thorns, and persistent dark red fruits. Tolerates wide variety of sites, good for bank stabilization, and birds enjoy berries and shelter. **Zone 3 Native**

Common Witchhazel (*Hamamelis virginiana*) Grows 20 to 30 feet with a similar spread. A small tree with an irregular crown. Fragrant, yellow flowers in October and good yellow fall color. Found in moist soils along streams and lakes. Sun to shade. **Zone 4 Native**

Crabapple (*Malus sp.*) Many varieties available. Grows 15 to 25 feet with similar spread. Attractive, small tree with showy, spring flowers and small fruits, some edible. Full sun. Adaptable to poor soil but must be well-drained. Good for birds. **Zone 4**



Eastern Wahoo (*Euonymus atropurpurea*) Grows to 25 feet. Has tiny, purple flowers, orange fruit and orange to purple fall color. Shade. Moist soil. **Zone 4**

Hawthorn (*Crataegus sp.*) Many species, some are native, some are not. Grows 15 to 30 feet. Thorny shrub with interesting, twisted branches, apple-like blossoms and tiny fruits in fall. Yellow to orange fall color. Full sun. Moist to dry soil. Naturally found in rocky, sandy soil. Check with local nursery regarding native status of particular species. **Zone 4 (Native)**

Hop Hornbeam (*Ostrya virginiana*) Also known as Ironwood. Grows 20 to 30 feet. A round-topped tree with reddish-brown, shaggy bark. Found in rich, rocky woods and on warm, gravelly slopes. Sun to shade. Moist to dry soil. **Zone 3 Native**



Kwanzan Cherry (*Prunus serrulata*) Grows 20 to 30 feet with a 20 foot spread. A vase-shaped tree with dark-green leaves that turn orange/bronze in the fall. Large pink flowers in summer. Sun. Moist soil. **Zone 5**

Lilac (*Syringa sp.*) Several species and varieties available. Grows from 3 to 30 feet with corresponding spread. Attractive, upright shrub with dense, green foliage and large clusters of showy, fragrant flowers from white to pink to purple. Some varieties spread to form large clumps. Full sun. Adaptable to various soil conditions, must be well-drained. Good bird nesting sites. **Zones 3-5**



Mountain Maple (*Acer spicatum*) Grows to 30 feet. Useful in naturalizing. Full to part sun. Moist soil. Small, understory tree with multiple trunks and a mushroom-shaped habit. Its bark is maroon-purple to reddish-brown and its dark, yellowish-green foliage consistently turns mottled-orange to bright-red in the fall. Grows best in a wet habitat or on damp, northern slopes. **Zone 3 Native**

Nannyberry (*Viburnum lentago*) Also known as Wild Raisin. Grows to 20 feet in fast, spreading growth. Showy, white flowers in June; black fruit and good fall color. Found along roads, edges of woods, streambanks and in thickets. Sun to shade. Moist to dry soil. Good for birds. *Nannyberry is moderately susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 3 Native**

Northern Arrowwood (*Viburnum recognitum*, or *V. dentatum* var. *lucidum*) Grows 10 to 15 feet in clumps and thickets. White spring flowers; blue fruit and red fall color. Sun to part-sun. Moist soil. Good for birds. *Northern arrowwood is highly susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 3 Native**

Pagoda Dogwood (*Cornus alternifolia*) Grows 15 to 20 feet with similar spread. Branches and leaves occur in flattened layers. Fragrant, white flowers and blue fruit. Maroon fall color. Red stems in winter. Part-sun to shade. Cool, moist, well-drained soil. **Zone 4 Native**

Purpleosier Willow (*Salix purpurea*) Also called 'Streamco Willow'. Standard form of the Dwarf Arctic Willow. Grows 10 to 18 feet in ideal conditions. A slender shrub that forms thickets. Typical, long, narrow willow leaves have a purplish cast to the upper surfaces and pale undersides. Shoots and branches have a purple to red hue. Easy to establish from unrooted cuttings. Excellent erosion control along streams. Sun to part-sun. Any moist to wet soil. Is not drought tolerant. Good for grouse and wildlife. **Zone 3**

Pussy Willow (*Salix discolor*) Grows to 20 feet in multi-stemmed clumps up to 15 feet wide. Spreading shrub with fuzzy catkins in spring. Full sun. Naturally found in moist to wet soil but tolerates drier soil. Good for birds. **Zone 3 Native**



Scarlet Elder (*Sambucus racemosa* spp. *pubens*) Also known as red elderberry. Grows to 20 feet. Flowers in mid to late July. Handsome red fruit in midsummer. Full sun. Moist, adequate soil moisture retention all year. **Zone 3 Native**

Serviceberry (*Amelanchier sp.*) Several species and varieties available. Also called Juneberry, Shad, Sugar Plum, Sarviceberry. Allegheny Serviceberry (*A. laevis*), Shadblow Serviceberry (*A. Canadensis*) and Downy Serviceberry (*A. arborea*) are native. Grows from 5 to 30 feet high in multi-stemmed clumps. Attractive shrub with white flower clusters, edible, purple-blue berries and orange-red fall color. Sun to shade. Moist to dry soil, depending on variety. Good for birds. **Zones 3-5 Native**

Speckled Alder (*Alnus rugosa*) Do not confuse with European Black Alder (*A. glutinosa*), which is invasive. Grows to 20 feet in large, bushy clumps. Does best in full sun but tolerates light shade. Moist to wet soil. Found along brooks, lakes, swamps. Does well in poor conditions. Fixes nitrogen. Good bird habitat and food. **Zone 3 Native**



Staghorn Sumac (*Rhus typhina*) Grows to 20 feet. Upright, open habit with fuzzy stems. Yellow flowers; large, upright clusters of red fruit and yellow to red fall color. Sun to shade. Well-drained soil. Tolerates poor soils. Common in old pastures and open areas. Good for migrating birds. **Zone 3 Native**

Striped Maple (*Acer pensylvanicum*) Grows to 30 feet with a 15 to 20 foot spread. Slender, upright tree with irregular branches and interesting greenish bark with white stripes. Part-sun to shade. Moist, cool soil. Found in cool woods and on rocky mountain slopes. **Zone 3 Native**



EVERGREEN

Eastern Redcedar (*Juniperus virginiana*) At least two varieties available. Naturally grows to 25 feet as a narrow, upright, pointy tree. Dwarf form is spreading and grows to 3 feet with 6 foot spread. Sharp needles are bluish-green or silver-gray. Wood and foliage aromatic. Does best in full sun. Tolerates adverse conditions, poor soils, wet areas. Can be found in dry soils of old fields and hillsides to peaty swamps. Fruit eaten by birds. **Zones 4-5 Native**

Fraser Fir (*Abies Fraseri*) Grows to 30 feet with a 20 foot spread. Typical conical Christmas tree shape. Has short, dark-green needles. Sun to part-sun. Prefers moist, well-drained soil but tolerates drier soils. Good for birds and small mammals. **Zone 4**



Japanese Yew (*Taxus cuspidata*) Grows to 20 feet. Densely branched, cone-shaped (if pruned) with soft, deep-green needles. Sun to shade. Moist, well-drained soil. Makes a good hedge. Smaller variety grows to 6 feet and spreads (Zone 4). **Zone 3**

Mugo Pine (*Pinus Mugo*) Grows to 13 feet if not pruned. Usually seen as a wide, shrubby pine, occasionally as a small tree. Also available in a dwarf form that only grows to 3 feet. Dense, compact form with medium-green needles. Sun to shade. Moist soil. Several varieties available. Used frequently for foundation plantings as it tolerates pruning. **Zone 3**



**MEDIUM SHRUBS
6 TO 12 FEET IN HEIGHT**

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	Sandy	Native
Deciduous									
Arrowwood Viburnum	3	X	X	X	X	X			X
Bayberry	3	X	X			X	X	X	X
Beach Plum	4	X				X	X	X	X
Beaked Hazelnut	3	X	X				X		X
Beautybush	4	X				X			
Black Chokeberry	3	X	X		X	X	X		X
Buttonbush	4	X	X		X				X
Cranberrybush*	3	X	X			X			X
Doublefile Viburnum	4	X	X			X			
Elderberry*	3	X				X			X
False Spirea	3	X	X			X			
Flowering Raspberry	4	X	X	X		X			X
Forsythia*	3-4	X	X			X			
Fothergilla*	4	X	X			X			
Gray Dogwood	3	X	X	X	X	X	X		X
Hazelnut	3	X	X				X		X
Highbush Blueberry	4	X	X	X	X	X	X	X	X
Hobblebush	4	X	X	X		X			X
Korean Spice Viburnum	4-5	X	X			X			
Mock Orange*	4	X				X			
Nanking Cherry	3	X				X			
Pee Gee Hydrangea	4	X	X			X			
Purpleleaf Sandcherry	3	X					X	X	
Red Chokeberry	4	X	X			X	X		X
Red-Osier Dogwood	3	X	X		X	X			X
Red-Twig Dogwood	3	X	X		X	X			
Redvein Enkianthus	5	X	X			X			
Silky Dogwood	3	X	X		X	X	X		X
Snowball Bush	3	X	X			X			X
Spicebush	5		X	X	X	X			X
Spirea*	3-4	X			X	X	X		X
Tatarian Dogwood	3	X	X		X	X			
Vernal Witchhazel	4	X	X			X			
Wayfaring Tree	3	X	X	X		X			X
Winterberry	3	X	X		X	X			X
Witherod	4		X	X	X	X	X		X
Evergreen									
Mountain Laurel	5	X	X	X		X	X		X
Rhododendron*	4-5	X	X	X		X			

* also available in dwarf forms



**MEDIUM SHRUBS
6 TO 12 FEET IN HEIGHT**

DECIDUOUS



Arrowwood Viburnum (*Viburnum dentatum*) Grows 6 to 10 feet high with similar spread. Vigorous, multi-stemmed shrub. White flowers in spring, followed by blue fruit and red fall color. Sun to shade. Adaptable to a variety of soils. Good for birds. *Arrowwood Viburnum is highly susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.*
Zone 3 Native

Bayberry (*Myrica pennsylvanica*) Grows from 5 to 10 feet high with an 8 to 12 foot spread. A dense, rounded shrub with shiny, dark-green, leathery leaves that are semi-deciduous. Leaves are very aromatic when crushed. Female plants bear small, gray, waxy fruits that are used in making Bayberry-scented candles etc. Sun to part-sun. Grows in poor, sandy soils. Salt and drought tolerant. Found along seashores. Good for birds. **Zone 3 Native**

Beach Plum (*Prunus maritima*) Grows 6 to 8 feet high. A rounded, dense, somewhat sprawling shrub with white flowers in spring and edible, purple fruit in fall. Full sun. Sandy, well-drained soil. Salt and drought tolerant. Found along beaches and sand dunes. Good for birds. **Zone 4 Native**



Beaked Hazelnut (*Corylus cornuta*) Grows to 10 feet. Multi-stemmed shrub with an edible nut in a bristly covering. Sun to shade. Moist soil. Found in thickets along roadsides and in open woods. Good for hedgerows. Good for birds and wildlife. **Zone 3 Native**

Beautybush (*Kolwizia amabilis*) Grows to 10 feet with an 8 foot spread. Attractive, upright, arching shrub used ornamentally. Pink flowers in spring and red fall color. Rapid growth. May need older stems removed occasionally to maintain vigor. Full sun. Moist, well-drained soil. **Zone 4**

Black Chokeberry (*Aronia melanocarpa*, previously, *Pyrus melanocarpa*) Grows 5 to 10 feet with a 5 foot spread. Bushy, compact habit. Spreads to form large colonies if left to its own. Showy, white flowers in spring; dark-purple fruit in fall and deep-red fall color. Sun to part-sun. Adaptable to a variety of soil conditions. Found in dry thickets and rocky uplands where it grows only to 4 feet. Good for birds. **Zone 3 Native**

Buttonbush (*Cephalanthus occidentalis*) Grows 6 to 10 feet with a similar spread. Darkish-green, glossy leaves. Large, showy, spherical flower heads (pom-poms) in summer, followed by spherical fruits that persist into winter. Sun to part-sun. Wet soil. Grows in up to 3 feet of water. Flood tolerant. Found along lakes and streams. Good for birds. **Zone 4 Native**

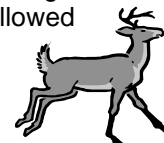
Cranberrybush (*Viburnum trilobum*, or *V. opulus* var. *americanum*) Also called American Cranberrybush and Highbush Cranberry. Several varieties available (some can be invasive). Standard variety grows to 12 feet with similar spread. A coarse, upright shrub. Clusters of showy, white flowers in spring, followed by clusters of edible, brilliant red berries that persist into winter. Moderate red fall color. Full to part-sun. Moist to wet soil. Tolerates a variety of soil types. Not drought tolerant. Slow growth the first two years. Makes a good open hedge. Good for birds and squirrels. *Cranberrybush is highly susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 3 Native**



Doublefile Viburnum (*Viburnum tomentosum* or *V. plicatum* var. *tomentosum*) At least two varieties available. Grows to 10 feet with a similar spread. Attractive shrub with interesting, horizontal, layered branching. Many clusters of white flowers in spring, followed by red to black fruit. Nice fall color. Sun to part-sun. Moist, well-drained soil. Good for mass plantings and screens. Good for birds. *Doublefile Viburnum is most resistant to the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 4**



Elderberry (*Sambucus canadensis*) Also known as American Elder. Grows to 10 feet with a similar spread. A vase-shaped, multi-stemmed, spreading shrub with bright-green to yellowish foliage. A 'fern-leaf' variety is also available. Large clusters of tiny, white flowers in early summer are followed by red to dark-purple fruits used in making jelly and wine. Rapid growth. Sun to part-sun (flowers and fruits best in full sun). Prefers moist soil but has some drought tolerance. Tolerates severe pruning. Found in rich lowlands, in thickets and open places along paths, streams and roads. Good for birds and deer. **Zone 3 Native**



False Spirea (*Sorbaria sorbifolia*) Grows to 8 feet with a 5 to 10 foot spread. A spreading, upright, multi-stemmed shrub with fern-like foliage and large plumes of white flowers. Sun to part-sun. Moist soil. **Zone 3**

Flowering Raspberry (*Rubus odoratus*) Grows from 5 to 10 feet with equal spread. An erect, branching shrub with large, deep-green, maple-shaped leaves. Large, showy, fragrant, pink to purple flowers in early summer followed by dry, red fruit. Sun to shade. Moist soil. Found in rocky woods and moist ravines. Best used in the back of a shrub border. **Zone 5 Native**

Forsythia (*Forsythia sp.*) Many varieites available. Check on local hardiness. Grows 6 to 10 feet with a similar spread. Upright to arching varieites as well as ones developed for pruning. Full shrub with light-green leaves and varying shades of yellow flowers in spring. Flowers profusely in good conditions. Sun to part-sun (flowers best in full sun). Moist, rich soil. **Zones 3 to 5**

Fothergilla (*Fothergilla major*) Grows 6 to 10 feet with a similar spread. Dense, rounded, multi-stemmed shrub with deep-green leaves. Early, fragrant, white, 'bottle-brush' flowers. Excellent yellow to red fall color. Slow growth. Sun to part-sun. Moist, well-drained, acid soil. **Zone 4**

Gray Dogwood (*Cornus racemosa*) Grows 10 to 12 feet with similar spread. A multi-stemmed, spreading shrub with white flowers in spring and white berries in summer. Interesting, reddish bark turns gray with age. Sun to shade. Tolerates a variety of soils. Some drought tolerance. Found along roadsides, in open thickets and swamp edges. Good for birds and wildlife. **Zone 3 Native**

Hazelnut (*Corylus americana*) Also called Filbert. Grows 8 to 10 feet with a 4 to 6 foot spread. A strong, multi-stemmed shrub often forming thickets. Round edible nuts in fall. Nice, orange fall color. Sun to part-sun. Dry soil. Found on edges of woods and along open stone walls. Good for birds and wildlife. **Zone 3 Native**

Highbush Blueberry (*Vaccinium corymbosum*) Several varieties available; some naturally-occurring. Grows from 6 to 10 feet in an oval, upright form. Attractive, twisted branches, white flowers in spring; bright red fall color; red stems in winter and large edible blue fruits. Sun to shade (best fruit and shrub shape in full sun). Acid, sandy, peaty soil. Wet to dry. Found in acidic lowlands, along lakes and in rocky woods. Depending on soil at planting site, may need to add acid during the first and second years after planting to help get well established. Good for birds and wildlife. **Zone 4 Native**



Hobblebush (*Viburnum alnifolium*) Grows to 10 feet. A graceful, erect, somewhat straggling shrub that spreads to form dense thickets. Large, heart-shaped leaves and large, showy clusters of white flowers, followed by purple fruits. Red fall color. Sun to shade. Moist soil. Found along lakes and streams and in cool, moist woods. Good for birds and deer. *Hobblebush is moderately susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 4 Native**

Korean Spice Viburnum (*Viburnum carlesii*) An ornamental viburnum. Grows 4 to 8 feet high with similar spread. A dense, rounded shrub with fragrant, white flowers in spring and small, red fruit. Red fall color. Sun to part-sun. Moist soil. Good for birds. *Korean Spice Viburnum is most resistant to the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zones 4 to 5**



Mock Orange (*Philadelphus sp.*) Several species and varieties are available in standard and dwarf forms. Grow from 2 to 10 feet with corresponding spread. Most are upright with attractive green foliage. Fragrant, showy, white flowers in early summer. Rapid growth. Full sun. Moist soil. **Zone 4**



Nanking Cherry (*Prunus tomentosa*) Grows 8 to 10 feet with similar spread. A dense, rounded shrub with fragrant, pink flowers in spring and edible, red cherries. Used in mass plantings. Full sun. Moist soil. Good for birds. **Zone 3**

Pee Gee Hydrangea (*Hydrangea paniculata*) Grows to 10 feet with equal spread. A large, upright shrub with large, showy clusters of flowers in summer that turn from white to pink to brown and persist through winter. Used in dried flower arranging. Rapid growth. Sun to part-sun. Moist soil. **Zone 4**

Purpleleaf Sandcherry (*Prunus X Cistena*) Grows to 8 feet with a 6 foot spread. Has purple leaves, pink flowers in spring and blue fruit in fall. Found on beaches. Full sun. Sandy, well-drained soil. Tolerates harsh conditions. Good for birds. **Zone 3**

Red Chokeberry (*Aronia arbutifolia*, previously, *Pyrus arbutifolia*) Grows 6 to 10 feet with a 3 to 5 foot spread. A slender, upright, multi-stemmed shrub with glossy, dark, blue-green leaves. Long-blooming, white spring flowers and persistent red fruit. Nice pink to red fall color. Will spread if allowed. Sun to part-sun. Adaptable to many soils. Found in bogs, wet thickets and shaded swamps. Check hardiness of cultivated varieties. **Zone 3 Native**

Red-Osier Dogwood (*Cornus stolonifera* or *sericea*) Grows 8 to 10 feet with similar spread. Spreads rapidly by underground shoots. Clusters of white flowers in spring and white to bluish berries. Naturally-occurring plants have red twigs. Cultivated varieties have brilliant red or yellow twigs, providing winter interest. Sun to part-sun. Moist to wet soil. Tolerates poor drainage. Found along lake and stream edges and in wet ditches. Good for birds. **Zone 3 Native**



Red-Twig Dogwood (*Cornus baileyi*) Cultivated variety very similar to Red-Osier Dogwood (above) but does not spread. **Zone 3**

Redvein Enkianthus (*Enkianthus campanulatus*) Grows 6 to 8 feet. A narrow, upright shrub with pink, bell-shaped flowers with red veins in spring. Gold to red fall color. Used ornamentally. Care is similar to rhododendrons. Sun to part-sun. Moist soil. **Zone 5**

Silky Dogwood (*Cornus amomum*) Very similar to Gray Dogwood. Grows 6 to 10 feet with similar spread. A loose, multi-stemmed shrub with clusters of white flowers in spring and blue berries into fall. Rapid growth. Used in streambank protection. Sun to part-sun. Moist to wet soil. Tolerates poorly-drained soil. Some drought tolerance. Found along lakes and streams and in moist thickets. Good for birds and wildlife. **Zone 3 Native**

Snowball Bush (*Viburnum opulus*) Also called European Cranberrybush. Naturally-occurring as well as cultivated varieties are available, both standard and dwarf. Grows 10 to 12 feet high with a 6 to 10 foot spread. Large, rounded clusters of double, white flowers cover the plant in late spring. Cultivated varieties usually do not have fruit. Yellow fall color. Easy to grow. Often grown in masses and large areas. Sun to part-sun. Moist soil. Dwarf form is a mounded, dense shrub with no flowers, 2-3 feet high with a similar spread and maroon fall color. Dwarf form tolerates some shade. *Snowball Bush is highly susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 3 Native**

Spicebush (*Lindera benzoin*) Grows 3 to 12 feet high. An upright, spreading shrub. Deep-green leaves with pale undersides. Insignificant yellow flowers before leaves appear in spring. Shiny, red fruit close to the stem through summer and fall. Fruit, leaves and twigs have a spicy smell when crushed. Part-sun to shade. Moist to wet soil. Found along streams and in damp woods. Good for birds. **Zone 5 Native**



Spirea (*Spirea* sp.) Naturally-occurring and many cultivated varieties and forms also available. Grow 1 to 8 feet with a 2 to 12 foot spread. Attractive, many-branched shrubs occurring in various forms and sizes from mounded to arching. Small leaves and numerous flower clusters in different sizes and colors in late spring to summer. Some varieties can be used as groundcovers. Generally hardy and easy to care for. Full sun. Moist to dry soil. Native species can be found in open, wet meadows and along lakes and ditches. **Zones 3 to 4 Native**



Tatarian Dogwood (*Cornus alba*) Several varieties ranging from 5 to 10 feet high and with spreads of 4 to 8 feet. Vigorous, upright shrubs that may sucker to form thickets. Stems range from bright-red to yellow and are attractive in winter. Leaves vary from simple green to variegated green with white, cream, yellow and rose. Sun to part-sun. Tolerate heavy and damp soil. **Zones 3 to 4**

Vernal Witchhazel (*Hamamelis vernalis*) Grows 6 to 10 feet with similar spread. A dense, multi-stemmed shrub with dangling, fragrant, yellow flowers in spring. Excellent yellow fall color. Good for unpruned hedges, screens and groupings. Sun to part-sun. Does best in moist, well-drained soil. **Zone 4**

Wayfaring Tree (*Viburnum lantana*) Naturally-occurring and cultivated. Grows from 6 to 13 feet high with a somewhat greater spread. Upright and rounded with compact growth habit. Large, fuzzy, dark-green leaves and many round clusters of white flowers in spring. Red fruit in summer turns black in fall. Sun to part-sun. Tolerates some shade. Moist soil. Good for birds. *Wayfaring Tree is susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zones 3 to 4 Native**

Winterberry (*Ilex verticillata*) Naturally grows 6 to 10 feet with similar spread. Cultivated varieties are somewhat smaller. Multi-stemmed shrub with slightly glossy leaves. Small yellow flowers followed by red berries that persist into winter. Need both male and female plants for fruit. Yellow fall color. Sun to part-sun. Moist to wet soil. Tolerates a variety of soil types. Found in swampy areas and along ditches but grows equally well in lighter, drier soils. Winter stems with berries used decoratively. Good for birds. **Zones 3 to 4 Native**



Witherod (*Viburnum cassinoides*) Also called Wild Raisin. Grows 6 to 10 feet with a lesser spread. A slender, upright shrub with glossy, green leaves. Round clusters of feathery, white flowers in late spring and whitish fruit turning blue-black in fall. Red fall color. Sun to shade. Moist to wet soil but tolerates drier conditions. Found in damp clearings, swamps and moist thickets. Good for birds. *Witherod is moderately susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 4 Native**

EVERGREEN



Mountain Laurel (*Kalmia latifolia*) Grows to 12 feet with similar spread (larger in southern New England). A vigorous, slow-growing shrub with stout, forking branches that form a compact, rounded crown. Glossy, leathery, dark-green leaves and clusters of cup-shaped pink flowers in late spring. Sun to shade. Moist, acid, well-drained soil. Found in rocky woods, clearings and, sometimes, swampy areas. It is rare in northern New England and protected by law in Maine. Needs protection from winter sun and wind. **Zone 5 Native**

Rhododendron (*Rhododendron* sp.) Many varieties; some naturally-occurring, many cultivated. Grow from 2 to 10 feet with corresponding spreads. Growth forms vary from compact to loose and spreading. Leathery, dark-green leaves (small to large) and spectacular spring or summer flowers in shades from white to pink to lavender to red. Sun to shade. Moist, acid soil. Need protection from winter sun and wind. [Native species Rhodora (*R. canadense*) is listed in "Small Shrubs" section.] **Zones 4 to 5**



**SMALL SHRUBS
LESS THAN 6 FEET IN HEIGHT**

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	Sandy	G/C	Native
Deciduous										
American Fly Honeysuckle	3	X	X				X	X		(X)
Annabelle Hydrangea	4	X	X			X				
Bristly Locust	4	X				X				
Bush Cinquefoil	3	X	X		X	X	X			X
Bush Honeysuckle	3	X	X	X			X	X		X
Cotoneaster	4	X	X			X			X	
Cutleaf Stephanandra	3	X	X			X			X	
Cranberry	3	X			X	X			X	X
Dwarf Arctic Willow	3	X	X		X	X				
Dwarf Fothergilla	4	X	X			X				
Flowering Almond	4	X				X				
Floweringquince	4	X	X			X				
Fragrant Sumac	3	X					X	X	X	
Hancock Coralberry	4	X	X			X	X			
Indiancurrant Coralberry	3			X			X			
Leatherwood	3			X		X				X
Mapleleaf Viburnum	3	X	X	X		X	X			X
Partridgeberry	3			X		X			X	X
Rhodora	3	X			X	X				X
Rose	3-5	X				X	X			(X)
Running Serviceberry	3	X	X			X			X	X
St. Johnswort	4	X	X				X	X		X
Silver Creeping Willow	4	X			X	X				
Snowberry	3	X	X		X	X	X			X
Summersweet	3	X	X	X	X	X				X
Sweet Fern	3	X					X	X		X
Sweet Gale	3	X			X	X				X
Weigela	4	X				X	X			
Evergreen										
American Yew	3		X	X		X			X	X
Bearberry	3	X	X				X	X	X	X
Bog Rosemary	3	X	X		X	X				X
Creeping Juniper	3-4	X	X			X	X	X	X	X
Dwarf Balsam Fir	3	X	X			X				
Dwarf Cedar	3-4	X	X			X				
Dwarf Hemlock	3-4	X	X	X		X				
Labrador Tea	3		X		X	X				X
Leucothoe	5			X		X			X	(X)
Lingonberry	4	X	X	X	X	X	X		X	X
Sheep Laurel	3	X	X		X	X	X			X
Siberian Carpet Cypress	3	X	X			X			X	
Spreading Yew	3	X	X	X		X	X			



SMALL SHRUBS LESS THAN 6 FEET IN HEIGHT

DECIDUOUS



American Fly Honeysuckle (*Lonicera canadensis*) Do not confuse with other honeysuckles from the family *Lonicera* – non-native honeysuckles, such as the European Fly Honeysuckle and many others are very invasive and a threat to Maine. Grows 2 to 5 feet high. A straggling shrub with handsome red berries. Sun to part-sun. Sandy, dry soil. Drought tolerant. Found in cool, rocky woods. **Zone 3 Native**

Annabelle Hydrangea (*Hydrangea arborescens*) Grows 3 to 5 feet. A spreading shrub with numerous upright stems. Large, rounded, white flower heads in late summer. Sun to part-sun. Moist soil. An excellent shrub with best performance if treated as a perennial and cut to the ground in late fall or early spring. **Zone 4**

Bristly Locust (*Robinia fertilis*) Grows to 6 feet and forms thickets. Has light-green, pea-like foliage with attractive pink flowers in late spring, followed by bristly seedpods. Full sun. Dry, sandy, poor soil. Drought tolerant. Excellent for stabilizing steep, gravelly areas. **Zone 4**

Bush Cinquefoil (*Potentilla fruticosa*, or *Dasiphora fruticosa* ssp. *floribunda*) Also known as Golden-hardhack, Potentilla, and Shrubby cinquefoil. Native and cultivated. Many varieties available. Grows 2 to 4 feet with equal spread. Compact to spreading habits. Small leaves from silver-green to light-green to blue-green to dark-green. Flowers occur in shades of white, yellow, pink and orange that bloom from early summer through to frost. Full sun best. Moist soil, although several varieties are very drought tolerant *once established*. Naturally found in wet to dry meadows, along lake shores and in open areas. **Zone 3 Native**

Bush Honeysuckle (*Diervilla lonicera*) Also called Northern Bush Honeysuckle. Grows 1 to 4 feet with a mounded habit. Yellow trumpet-shaped flowers and insignificant fruit. Sun to shade. Dry soil. Drought tolerant. Found in open, rocky woods and field edges. **Zone 3 Native**

Cotoneaster (*Cotoneaster apiculatus*, *divaricata*, *horizontalis*, *microphylla*) Numerous forms available. Grow 2 to 3 feet high spreading to 6 feet in some cases. Small, often shiny, green leaves and small, pink flowers in spring followed by red fruits. Red fall color. Sun to part-sun. Adaptable to many soils. Some varieties are salt tolerant. Used as ground or bank covers. May require extra attention the first year but do well once established. **Zone 4**

Cutleaf Stephanandra (*Stephanandra incisa* var. 'Crispa') Grows to 2 feet high with a 3 to 6 foot spread. A low, spreading, mounded shrub with small, white flowers in summer. Sun to part-sun. Does best in moist, acid, well-drained soil but tolerates wetter soils. Good on banks and as a ground cover. **Zone 3**

Cranberry (*Vaccinium macrocarpon*) Grows to 6 inches. Slow growing. Small, glossy, leathery leaves, bronzy in spring and dark-green in summer, turn a variety of colors in fall. White to pink, tube-shaped flowers in nodding clusters and followed by a dark red, edible fruit. Good for edible or wildlife landscapes. Requires acidic soil. Full sun. Wet, periodically inundated by water, or moist soil conditions. **Zone 3 Native**

Dwarf Arctic Willow (*Salix purpurea* var. 'Nana') Grows 3 to 6 feet with equal spread. (Non-dwarf variety grows to 18 feet.) Dense, low shrub with arching branches and fine, powdery, blue-green foliage. Sun to part-sun. Wet soil. Flood tolerant. Good for streambanks and pond edges and for low hedges. Not salt tolerant. Good for birds and wildlife. **Zone 3**



Dwarf Fothergilla (*Fothergilla gardenii*) Grows 2 to 3 feet with similar spread. Attractive, small shrub with deep-green leaves and early, white, fragrant, 'bottle-brush' flowers. Excellent red to yellow fall color. Sun to part-sun. Moist, well-drained, acid soil best. Good in groups. **Zone 4**



Flowering Almond (*Prunus glandulosa*) Grows 4 to 5 feet high with a 3 to 4 foot spread. Small, spreading shrub with showy, pink flowers in early spring. Used ornamentally. Full sun. Moist, fertile soil. Check local hardiness. Some varieties are not long-lived. **Zone 4**

Floweringquince (*Chaenomeles speciosa*) Several varieties available. Grows from 2 to 6 feet high, depending on variety, with a similar spread. Attractive, upright or spreading shrub with spiny branches (most varieties). Spring blossoms range from white to peach to pink to red. Irregular, apple-shaped fruit. Sun to part-sun. Moist soil. Occasional pruning keeps plant vigorous. **Zones 4 to 5**



Fragrant Sumac (*Rhus aromatica*) Available in standard and dwarf (Gro-Low) varieties. Standard form grows 2 to 6 feet with a 6 to 10 foot spread and the dwarf grows 2 to 3 feet with a 6 to 8 foot spread. A low, upright or straggling shrub with compound leaves and small, fragrant, yellow flowers in spring, followed by red fruit. Good orange to red fall color. Leaves are aromatic when crushed. Full sun. Dry, sandy or rocky soil. Good as bank covers and in mass plantings. Dwarf variety used as a ground cover. Found in dry, rocky, open woods. **Zone 4**

Hancock Coralberry (*Symphoricarpos X Chenaultii*) Grows 2 to 4 feet with a 6 foot spread. A small, open shrub with graceful arching branches. May spread by suckering. Pink spring flowers, followed by pink to red fruits in fall. Sun to part-sun. Tolerates a variety of soils. Good bank cover. **Zone 4**

Indiancurrant Coralberry (*Symphoricarpos orbiculatus*) Similar to above. Grows 3 to 6 feet and spreads to form thickets. Has white to pink flowers and red fruits. Shade. Dry soil. **Zone 3**

Leatherwood (*Dirca palustris*) Grows to 4 feet. A short, dense shrub with solitary or few short trunks and ascending, candelabra-like branching. Narrow, yellow, bell-shaped flowers hang in pendulous clusters and last a long time. Leaves are dark green in summer, turning a clear yellow for fall. Thrives in moist, shady sites. **Zone 3 Native**

Mapleleaf Viburnum (*Viburnum acerifolium*) Grows 3 to 6 feet. A slender, branched shrub with clusters of white flowers in late spring; blue-black fruit and large, downy, 3-lobed leaves that turn purple in the fall. Sun to shade. Moist soil. Found as an understory shrub in dry woods. Good for birds. *Mapleleaf Viburnum is susceptible to attack from the Viburnum Leaf Beetle. Check with your local nursery to see if the Beetle is a problem in your area.* **Zone 3 Native**

Partridgeberry (*Mitchella repens*) Grows to 2 inches. A delicate, trailing, evergreen herb with white, fragrant, tubular flowers in pairs and red fruits that persist into winter. Can be used as groundcover under acid-loving shrubs. Shade. Moist soil. **Zone 3 Native**

Rhodora (*Rhododendron canadense*) A deciduous rhododendron growing from 1 to 3 feet tall with many branches and showy, rose to purple flowers in spring. Full sun. Wet, cold, peaty soil. Often seen in large colonies in bogs and old, wet pastures. **Zone 3 Native**

Rose (*Rosa sp.*) Many species and varieties available in all forms and shapes - some are native and many are cultivated or introduced. Meadow Rose (*R. blanda*), Pasture Rose (*R. carolina*) and Virginia Rose (*R. virginia*) are native. Do not plant the invasive Multiflora or Rambler (*R. multiflora*) or Rugosa (*R. rugosa*) roses. Most grow from 2 to 6 feet, although some arching and climbing types grow to 10 feet. All require full sun. Soil requirements range from moist to dry and most need fertile, well-drained soil. Check with local nurseries for hardy varieties and low-maintenance roses. **Zones 3 to 5 Native**



Running Serviceberry (*Amelanchier stolonifera*) Grows to 2 feet. Stoloniferous groundcover that forms thickets. White flowers and autumn foliage. Sun to part-sun. Moist soil. **Zone 3 Native**



St. Johnswort (*Hypericum sp.*) Naturally-occurring and cultivated species and varieties available. Avoid Shrubby St. Johnswort (*H. prolificum*), which is invasive. Most grow 2 to 3 feet high with similar spread. Compact plants with blue-green foliage and bright-yellow flowers with different bloom times and lengths. Sun to part-sun. Check specific variety for soil preferences; some grow in wet areas, some in dry, sandy soil. Found along shores, in wet meadows, old fields and pastures. **Zone 3 to 5 Native**

Silver Creeping Willow (*Salix repens var. nitida*) Grows to 2 feet high and spreads. Silvery foliage, insignificant flowers and fruits. Rapid growth. Sun. Moist to wet soil. **Zone 4**

Snowberry (*Symphoricarpos albus*) Grows 3 to 6 feet high with similar spread. Spreads by suckering so will form thickets, if allowed. Good for erosion control. Blue-green foliage, pink spring flowers and ornamental, white berries in fall. Rapid growth. Sun to part-sun. Moist to wet soil. Adaptable to a variety of soil conditions. Good for birds. **Zone 3 Native**

Summersweet (*Clethra alnifolia*) Also called Hummingbird Clethra or Sweet Pepperbush. Grows 3 to 8 feet high with a 4 to 6 foot spread. Attractive, deep-green foliage and very fragrant, white or pink flowers in summer. Sun to shade. Moist to wet soil. Salt tolerant. **Zone 3 Native**

Sweet Fern (*Comptonia peregrina*) Grows 2 to 4 feet high with similar spread. *Not* a true fern but has somewhat leathery fern-like foliage which has a nice, pungent, spicy smell. Brown catkins in early spring and a bur-like nut in the fall. Full sun. Moist to dry soil. Grows well on poor, sandy, rocky soil. Deep, good root system. Good for roadbanks and steep, dry areas. **Zone 3 Native**

Sweet Gale (*Myrica gale*) Grows 2 to 4 feet high and spreads 4 to 8 feet. A many-branched shrub with dark-green, aromatic foliage. Insignificant brown flowers and fruits. Sun to part-sun. Moist to wet soil. Found along lake and stream edges. Good for shore-dwelling birds and wildlife. **Zone 3 Native**

Weigela (*Weigela sp.*) Many species and varieties have been cultivated. Grows 2 to 6 feet high with equal spread. Growth varies from compact to open, depending on variety. Many-branched shrubs with pink to red, showy, tubular flowers that attract hummingbirds. Easy to grow. Full sun. Moist soil. **Zone 4**



EVERGREEN



American Yew (*Taxus canadensis*) Also known as Canadian Yew. Grows 2 to 3 feet high with a 6 to 8 foot spread. A low, straggling shrub often growing in clumps. Dark-green needles; red, berry-like fruit with poisonous seeds. Part-sun to shade. Cool, moist soil. Found in shady, cool, damp, rocky woods under other evergreens. Good as a ground cover. Does not tolerate heat or drought. Good for birds, moose, and deer. **Zone 3 Native**

Bearberry (*Arctostaphylos uva-ursi*) Grows to 1 foot and spreads 2 to 4 feet. A trailing shrub, good as a ground cover. Small, dark-green, shiny leaves; small, white to pink flowers in spring, followed by red berries in late summer. Red fall color. Slow growth but reliable once established. Sun to part-sun. Poor, sandy, acid, dry soil. Drought and salt tolerant. **Zone 3 Native**

Bog Rosemary (*Andromeda glaucophylla or polifolia*) Grows 1 to 3 feet with similar spread. Forms large clumps. Each plant is sparsely branched with leathery, deep-blue-green leaves and small, white to pink flowers in spring. An interesting and beautiful plant, especially good for naturalizing. Sun to part-sun. Cool, moist, peaty soil. Found in bogs and along lake shores. **Zone 3 Native**

Creeping Juniper (*Juniperus sp.*) Many species and varieties available. Grows 6 inches to 4 feet with 2 to 10 foot spreads. Upright to prostrate forms; variable foliage, from coarse and prickly to fine and lacy,



and from yellow-bronze to light-green to dark-green to blue-green, depending on variety. Several produce small, bluish to silver, aromatic fruits. Slow to rapid growth but all are sturdy and long-lived once established. Most require full sun. Wide range of soil tolerances; most do well in poor, dry soil but some tolerate wetter soils. A juniper can be found for just about every sunny situation. Many are drought, heat and salt tolerant. Most are good for birds and wildlife. **Zones 3 to 5** *J. horizontalis* and *J communis* are Native

Dwarf Balsam Fir (*Abies balsamea*) Similar to standard fir but much smaller. Grows 1 to 2 feet high with a 1 to 2 foot spread. Rounded shrub with dark-green needles. Sun to part-sun. Moist soil. Used ornamentally. **Zone 3**

Dwarf Cedar (*Thuja occidentalis*) Several dwarf varieties are available. Grows 1 to 4 feet high with variable spreads, depending on variety. Dense shrubs with rounded or pyramidal forms. Rich, dark-green foliage. A golden-needled form is also available. Full sun. Moist soil. Used ornamentally and for low hedges. **Zones 3 to 4**



Dwarf Hemlock (*Tsuga canadensis*) Several varieties; some with pendulous, spreading branches. Grow from 1 to 3 feet high with 2 to 5 foot spreads. Attractive, lacy, green needles. Sun to shade. Cool, moist soil is best. Must be well-drained. Used ornamentally. **Zones 3 to 4**

Labrador Tea (*Ledum groenlandicum* or *Rhododendron groenlandicum*) Grows to approximately 3 feet high with a spread of 3 feet. Typically found growing in bogs and swamps. Clusters of white flowers bloom in the spring. Grows best with full sun to partial shade. Prefers a wet, acid soil. Leaves are evergreen with a silvery underside. **Zone 3 Native**

Leucothoe (*Leucothoe fontanesiana*) Grows 3 to 5 feet high and 5 or more feet wide. A graceful, broad-leaved evergreen with dark, lustrous foliage and small, delicate, fragrant, white flowers in spring. Nice, purple winter color. Good in woodland settings and as a high ground cover on shady slopes. Low-maintenance, reliable plant as long as it has shade and is not allowed to dry out. Shade. Moist, acid, well-drained soil, high in organic matter. **Zone 5**

Lingonberry (*Vaccinium vitis-idaea*) Also called Crowberry or Mountain Cranberry. Grows to 7 inches and spreads. Small, glossy-green, leathery foliage and small pink or white flowers, followed by small, red fruit, sour but edible. Found in bogs and wet or dry, rocky, mossy slopes. Sun to shade. Dry to moist soil. **Zone 4 Native**

Sheep Laurel (*Kalmia angustifolia*) Grows to 3 feet with slightly narrower spread. Slender, dense, low-growing shrub with upright stems; shiny, leathery, deep-green leaves with pale undersides; and showy clusters of deep-pink, saucer-shaped flowers in early summer. Poisonous to livestock, hence, the alternate name, Lambkill. Sun to part-sun. Poor, acid soil; wet to dry. Tolerates occasional flooding. Found in moist, open swamps, pastures and rocky slopes. **Zone 3 Native**



Siberian Carpet Cypress (*Microbiota decussata*) Grows to 12 inches high and can spread up to 10 feet. Densely branched with soft-green needles that turn bronze in winter. Rapid growth. Good as an evergreen ground cover. Sun to part-sun. Moist soil. Tolerates adverse conditions. **Zone 3**

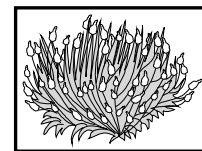
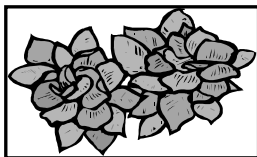
Spreading Yew (*Taxus X media* var *Densiflora*) Grows to 4 feet with an 8 foot spread. Compact shrub with dark-green needles. Slow growth. Sun to part-sun. Moist to dry soil. Good for hedges and mass plantings. **Zone 3**



GROUND LAYER

PERENNIAL HERBS, FLOWERS, FERNS, GRASSES & VINES

The ground layer includes herbs, flowers, ferns, grasses and some vines. Most of these die back in the winter but provide a valuable layer of vegetation in a buffer during the growing season and a soil-protective mat of vegetation and roots through the winter. This layer holds the surface soil in place and absorbs much of the water flowing across a buffer. This layer is a must for the proper functioning of any buffer.





PERENNIAL HERBS & FLOWERS

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	G/C	Native
Anise Hyssop	4	X				X			
Artemisia	3	X	X				X		
Aster	3	X	X			X			(X)
Astilbe	4	X	X		X	X			
Baneberry, White and Red	3		X	X		X			X
Baptisia	3	X	X		X	X	X		
Barrenwort	3		X	X	X	X		X	
Barren Strawberry	4	X	X	X		X		X	(X)
Basket of Gold	3	X	X			X			
Bee Balm	4	X	X		X	X			
Bellflower	4	X	X			X	X	X	(X)
Bergenia	4	X	X		X	X		X	
Bird's Foot Trefoil	3	X			X	X	X	X	
Black-eyed Susan	3	X	X			X			(X)
Blazing Star	3	X	X		X	X	X		
Bleeding Heart	4		X			X			
Bloodroot	3		X	X		X			X
Blue Cohosh	3-4		X	X		X	X		X
Blue Star Flower	3		X			X			
Bluebead-lily	3		X	X		X	X		X
Blueberry	3	X	X			X	X	X	X
Boltonia	4	X			X	X			
Boneset	3	X	X		X	X			X
Bowman's Root	4		X	X		X	X		X
Bugbane	3		X	X	X	X			
Bugloss	3	X	X	X	X	X			
Bunchberry	3			X		X		X	X
Butterfly Weed	4	X					X		
Cardinal Flower	3	X	X		X	X			X
Catmint	3	X	X		X	X	X	X	
Columbine	3-8	X	X			X			X
Comfrey	4		X		X	X			
Coneflower	3	X				X			(X)
Cornflower	3	X				X			
Cranesbill	3-5	X	X	X	X	X	X	X	
Creeping Phlox	3		X	X		X		X	X
Culver's Root	3	X	X			X			X
Cushion Spurge	3	X				X	X		
Daisy	4-5	X				X			



PERENNIAL HERBS & FLOWERS CONTINUED

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	G/C	Native
Daylily	3	X	X		X	X			
Evening Primrose	4-5	X	X			X	X	X	X
False Lupine	3	X	X			X	X		
False Sunflower	3	X	X			X	X		
Fleabane	4	X	X				X		X
Foamflower	4		X	X	X	X		X	(X)
Forget-Me-Not	3		X	X	X	X			(X)
Germander	5	X	X			X		X	
Globeflower	3	X	X		X	X			
Globe Thistle	3	X					X		
Goat's Beard	4	X	X		X	X			(X)
Goldenrod	3	X				X	X		X
Heather	4	X				X		X	
Helen's Flower	3	X			X	X			(X)
Horehound	3	X					X	X	
Hosta	3	X	X	X	X	X		X	
Hyssop	3	X	X			X			
Indian Cucumber-root	3		X	X		X			X
Iris	3-5	X	X		X	X	X		(X)
Jack-in-the-Pulpit	3		X	X	X	X			X
Jacob's Ladder	3		X		X	X		X	(X)
Jewelweed	3		X	X	X	X			(X)
Joe-Pye Weed	3	X	X		X	X			X
Jupiter's Beard	4	X	X			X			
Lady's Mantle	3	X	X			X		X	
Lamb's Ears	4	X	X			X		X	
Lamiaestrum	3		X	X		X		X	
Lavender	5	X				X			
Lemon Balm	4	X	X			X	X		
Ligularia	4		X	X	X	X			
Lily	3-5	X	X			X			
Lily of the Valley	3		X	X		X		X	
Lily-turf	4	X	X	X	X	X	X	X	
Lungwort	3		X		X	X		X	
Lupine	4	X	X			X	X		(X)
Mallow	4	X				X	X		
Marsh Marigold	3	X	X		X				X
Masterwort	4		X	X		X			
Meadow Rue	3-5	X	X		X	X			(X)
Meadowsweet	4	X	X		X	X			
Milkweed	3	X			X	X	X		X



PERENNIAL HERBS & FLOWERS CONTINUED

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	G/C	Native
Moss Phlox	3	X	X			X	X	X	
Obedient Plant	3	X	X		X	X			X
Oregano	3	X				X		X	
Pachysandra	4		X	X		X		X	
Pearly Everlasting	3	X				X	X		X
Periwinkle	4	X	X	X		X		X	
Phlox	3	X				X			
Plume Poppy	3	X	X			X			
Potentilla	5	X	X			X	X	X	
Pussy-toes	3	X					X	X	
Sage	3-5	X				X	X		
Sedum	3	X	X			X	X	X	
Silverweed	4	X					X		X
Skullcap	4		X		X	X			
Snow-in-Summer	3	X				X	X	X	
Solidaster	5	X				X			
Solomon's Seal	3		X	X	X	X			(X)
Spikenard	3		X	X		X	X		X
Sunflower Helioopsis	3	X				X	X		
Sweet Flag	3	X	X		X				X
Sweet Woodruff	4		X	X		X		X	
Swordleaf Inula	3	X			X	X			
Thin-leaved Sunflower	3	X				X			X
Thyme	4	X	X			X	X	X	
Tickseed	3	X				X			
Trout-lily	3		X	X		X			X
Turtlehead	4	X	X		X	X			(X)
Veronica	3-5	X	X			X		X	
Violet	3-5	X	X			X		X	(X)
Virginia Bluebells	3		X	X		X			
White Clover	3	X	X		X	X		X	
Wild Ginger	3-4		X	X		X		X	(X)
Wild-oats	3		X	X		X			X
Wintercreeper Euonymus	3	X	X	X		X		X	
Wintergreen	3		X	X		X		X	X
Yarrow	3	X				X	X		



PERENNIAL HERBS AND FLOWERS

Anise Hyssop (*Agastache foeniculum*) Not related to Anise or Hyssop. Grows to 3 feet with a 2 foot spread or less, if crowded. Bushy, aromatic herb with long-blooming spikes of purple flowers attractive to bees, butterflies and hummingbirds. Anise-scented foliage and flowers used medicinally and in teas. Spreads by self-seeding. Full sun. Moist soil. **Zone 4**

Artemisia (*Artemisia sp.*) Also known as Wormwood. Several species and varieties available. Range in height from 6 inches to 6 feet with 1 to 3 foot spreads. All have silvery, delicate, fern-like, aromatic foliage that persists into winter and can be used dried. Most have inconspicuous flowers that blend with the foliage. Sun to part-sun. Poor, dry soil. Tolerates drought but not excess moisture or fertilizer. **Zone 3**

Aster (*Aster sp.*) Most are varieties of *A. alpinus*, *A. novae-angliae* and *A. lateriflorus*. Bushy plants with either a mounded or open habit and colorful, daisy-like flowers. Growth ranges from 6 inches to 6 feet. Taller ones may require staking and therefore may not be appropriate for naturalized buffer plantings. Flowers come in all colors. Most bloom in late summer but some bloom in spring also. Full sun although some tolerate some shade. Best in well-drained soil; some tolerate wet soil also. Some species are native. **Zone 3 New England Aster (*A. novae-angliae*) and New York Aster (*A. novi-belgii*) are Native**



Astilbe (*Astilbe sp.*) Many varieties available. Grow 1 to 4 feet with most in the 2 to 3 foot range. Delicate, fern-like leaves and showy plumes of flower clusters in white, pink, red and purple. Summer-blooming. Do best with occasional dividing. Sun to part-sun. Moist to wet, rich soil. Not drought tolerant and not tolerant of winter wetness. **Zone 4**

Baneberry, White and Red (*Actaea pachypoda* [white] and *A. rubra* [red]) Grows to 2 feet. Branched stems bear two or three large compound leaves, each thrice divided. Leaflets are deeply saw-toothed. Above the foliage are dense, globular clusters of small white flowers. Fruit is an attractive but poisonous white or red berry. White baneberry is sometimes called Dolls Eyes because the shiny white fruits resemble the china eyes once used in dolls. Part sun to shade. Moist soil. **Zone 3 Native**

Baptisia (*Baptisia sp.*) Two or three species available. Also called False Indigo. Bushy plant grows 3 to 4 feet with rich, bluish-green leaves and loose clusters of pea-like flowers in white, yellow or blue in spring or summer. Sun to part-sun. Best in rich soil but tolerates poor, dry soil and wet soil. **Zone 3**

Barren Strawberry (*Waldsteinia sp.*) Grows 6 to 8 inches and spreads to form a nice ground cover. Strawberry-like, semi-evergreen foliage. Yellow flowers in late spring. Easy to grow. Sun to shade. Well-drained soil. **Zone 4 Appalachian Barren Strawberry (*W. fragarioides*) is Native**

Barrenwort (*Epimedium sp.*) Grows 8 to 15 inches high as a compact, spreading ground cover. Strong rhizomes help in erosion control. Bright-green, compound leaves and white, yellow or red flowers in spring. Yellow, bronze or red fall color. Part-sun to shade. Rich, moist soil. Tolerates wet conditions. Good ground cover; may be slow getting established. **Zone 3**

Basket of Gold (*Aurinia sp.* or *Alyssum sp.*) Also called Perennial Alyssum. Grows 6 to 12 inches in a spreading mound. Semi-evergreen, grayish-green foliage. Masses of brilliant yellow flowers in early spring to summer. Rapid growth. Sun to part-sun (blooms best in full sun). Well-drained soil. Good in rocky areas. **Zone 3**

Bee Balm (*Monarda didyma*) Other species also cultivated. Grows 2 to 4 feet and spreads quickly. Lush, aromatic foliage and interesting, showy clusters of white, pink, red or purple flowers that attract bees, butterflies and hummingbirds. Sun to part-sun. Rich, moist soil best. Tolerates wet soil. Excellent for naturalizing. **Zone 4**





Bellflower (*Campanula* sp.) Also called Harebell. Cultivated from native and non-native species. Many varieties are available but not all are appropriate for natural plantings. Ones to consider include varieties of *C. rotundifolia*, *C. carpatica*, *C. glomerata*, *C. lactiflora*, *C. latifolia* and *C. poscharskyana*. They vary in height from low, spreading ground covers to 3 foot, bushy plants. All are spreading if given the right conditions. Attractive, deep-green foliage and clear blue, white or lavender bell-shaped flowers, sometimes in large clusters. Bloom in summer. Sun to part-sun. Moist well-drained soil. Some tolerate drought and some wet soil. **Zone 4 C. rotundifolia is Native**

Bergenia (*Bergenia cordifolia*) Grows 12 to 18 inches. Vigorous, spreading plants with large, bold, glossy, semi-evergreen leaves that turn from green to burgundy in cold weather. Showy spikes of white, pink or red flowers in early spring. Sun to part-sun. Moist soil. Tolerates wet soil. Good as ground cover in damp, sunny or partly sunny areas. **Zone 4**

Bird's Foot Trefoil (*Lotus corniculatus*) Grows 18 to 24 inches. A common wildflower in the Midwest. Useful as erosion control and quick cover on road banks and other disturbed areas. Bright-green foliage and brilliant yellow, pea-like flowers in spring and summer. Full sun. Tolerates a wide variety of soils (not sandy). Some drought tolerance. **Zone 3**

Black-eyed Susan (*Rudbeckia* sp.) Also called Yellow Coneflower. Several species and varieties; some native, some not; some short-lived and others long-lived and spreading. Some are invasive. Grows 1 to 4 feet with lush, green foliage and large, yellow to orange, daisy-like flowers with dark centers. Blooms summer to fall. Rapid growth. Easy to grow. Sun to part-sun. Moist soil. **Zone 3 R. hirta is Native**



Blazing Star (*Liatris* sp.) Several species cultivated. Also called Gay Feather. Grow 2 to 4 feet in clumps with stiff, grass-like foliage and tall flower spikes in summer. Flowers available in white, pink or purple. Good in natural areas. Sun to part-sun. Best in well-drained soil. Sandy soil okay. Some tolerate wet. Most are native to the Midwest and have become established in New England. **Zone 3**

Bleeding Heart (*Dicentra* sp.) Grows 1 to 3 feet and can spread to clumps 3 to 4 feet across. Dwarf and non-spreading varieties are available. Graceful, arching stems with fern-like leaves and arching sprays of heart-shaped flowers in white, pink or red in late spring. Part-sun. Tolerates full sun in cool areas. Moist, well-drained soil. Good near woodlands. **Zone 4**

Bloodroot (*Sanguinaria canadensis*) Grows from 6 to 12 inches high and is usually found in colonies. Leaves and root contain an orange/red juice that is poisonous. Flowers in early spring. Grows best in part sun to shade and leaf litter. **Zone 3 Native**

Blue Cohosh (*Caulophyllum thalictroides*) Grows to 3 feet. Thrice-compound leaves with lobed leaflets are purplish in spring. Inconspicuous, purplish-brown to yellow-green flowers in a loosely branched cluster. Clusters of flowers are followed by conspicuous, bright-blue berries. Good for back of a border. Part sun to shade. Moist to seasonally moist. **Zone 3-4 Native**

Blue Star Flower (*Amsonia tabernaemontana*) Also called Willow Amsonia. Grows 2 to 3 feet with willow-like, gray-green leaves and clusters of sky-blue, star-shaped flowers in late spring. Foliage turns yellow in fall. Nice, low-maintenance plant for natural settings. Does best in part-sun and cool, moist soil. Tolerates full sun and drier soils but is not as vigorous. Native to the Midwest. **Zone 3**

Bluebead-lily (*Clintonia borealis*) Grows to 1 foot. Stalk rises from a basal set of shiny, bright green, oblong leaves and has at its summit 3-6 yellowish-green, drooping, bell-like flowers. Bright blue, spherical poisonous berries follow the flowers. Part sun to shade. Moist to seasonally moist. **Zone 3 Native**

Blueberry (*Vaccinium angustifolium*) Also called Lowbush Blueberry. Grows to 1 foot and spreads by suckering. Small, glossy leaves turn bright-red in fall. Small, white flowers, followed by edible, blue fruit in mid to late summer. Sun to part-sun. Well-drained, acid soil. A sturdy, adaptable ground cover. Good



for birds and small mammals. Depending on soil at planting site, may need to add acid during the first and second years after planting to help get well established. **Zone 3 Native**

Boltonia (*Boltonia asteroides*) Grows 2 to 4 feet. An informal, vigorous, spreading, aster-like plant with blue-green foliage and profuse, small, white to pink, daisy-like flowers in late summer to fall. Easy to grow. Good for natural areas. Full sun best. Moist soil. Tolerates wet. **Zone 4**



Boneset (*Eupatorium perfoliatum*) Grows 3 to 5 feet. Vigorous, spreading, coarse-leaved plants with showy clusters of white flowers in summer and fall. Naturally occurs in moist, open areas. Sun to part-sun. Moist to wet soil. Good in natural plantings. **Zone 3 Native**

Bowman's Root (*Gillenia trifoliata*) Grows up to 3 feet tall with 2 foot spread. Bushy plant with white star-like flowers in late spring and summer. Dark red stems. Good fall color. Moderate moisture, but tolerates dry soil and drought when established. Part sun to shade. **Zone 4 Native**

Bugbane (*Cimicifuga sp.*) Also called Snakeroot or Black Cohosh. Tall, slender, woodland plants, growing 3 to 7 feet tall, with deep-green, fern-like foliage and 1 to 2 foot, arching stalks of fragrant, white to purple flowers in late summer to fall. Part-sun to shade. Rich, moist soil. Tolerates wet soil. Good in a wild garden. **Zone 3**

Bugloss (*Brunnera macrophylla*) Grows 12 to 18 inches. Fast-growing woodland plant with large, heart-shaped leaves, and small clusters of Forget-Me-Not-like flowers in spring. Sun to shade. Moist to almost wet soil. Good in woods and along pond or stream edges. **Zone 3**

Bunchberry (*Cornus canadensis*) A naturally-occurring woodland ground cover that is now available at some nurseries. Grows to 6 inches and spreads underground. Has four leaves and white 'dogwood' type flowers in early summer, followed by clusters of red berries. Needs undisturbed areas to become established. Shade. Cool, moist, acid soil. **Zone 3 Native**

Butterfly Weed (*Asclepias tuberosa*) Grows 2 to 3 feet. Vigorous, upright plants with narrow, green leaves and showy, bright-orange flowers in summer that attract butterflies. Full sun. Sandy, well-drained soil best. Tolerates dry, infertile soil. **Zone 4**



Cardinal Flower (*Lobelia cardinalis*) Grows 2 to 4 feet. Vigorous plants with rich, green foliage and tall spikes of scarlet flowers in summer. May need dividing to maintain vigor; self-seeds. May need winter protection in Zone 3; check when purchasing. Sun to part-sun. Best in part-sun. Rich, moist, well-drained soil. Tolerates wet conditions. Good in naturalized areas and near water. **Zone 3 Native**

Catmint (*Nepeta cataria, mussinii [X faassenii]*) Two species, one being the familiar Catnip. Both are spreading, aromatic herbs with gray-green leaves and spikes of flowers in late spring. Catnip grows 2 to 3 feet high with lemony-minty smelling leaves attractive to cats and white to pink flowers. Catmint is bushier and grows 12 to 18 inches in mounds with blue flowers. Both grow rapidly and should be planted where spreading is okay. Sun to part-sun. Rich, moist soil. Tolerates dry soil (helps control spreading) as well as wet. **Zone 3**



Comfrey (*Symphytum officinale*) Grows 1 to 2 feet. Vigorous, coarse, hairy, branching plant forms clumps. Large leaves at base of plant; smaller as they go up. Loose, branching clusters of white, pink, purple to blue flowers all summer. Good in natural settings. Part-sun. Moist to wet soil. **Zone 4**

Columbine (*Aquilegia canadensis*) Grows from 2 to 3 feet high with a spread of 1 to 1½ feet. Flowers are light pink with yellow to blood red with yellow and are bell shaped. Full sun to part shade. Prefers medium wet, well-drained soil but will tolerate a wide range as long as drainage is adequate. Flowers are attractive to hummingbirds. **Zones 3 to 8 Native**

Coneflower (*Echinacea angustifolia & purpurea*) Also known as Echinacea. Several varieties with different flower colors are available. Grows 2 to 4 feet. Sturdy plant with dark-green leaves and large,



daisy-like flowers with raised centers. Colors range from deep-pink to white to yellow. Easy to grow. Full sun. Moist, well-drained soil, especially in winter. Tolerates heat, drought and wind. **Zone 3 E.**
purpurea is Native

Cornflower (*Centaurea sp.*) Also called Perennial Bachelor's Buttons. Varieties available in several heights and colors – not confuse with Spotted knapweed (*Centaurea biebersteinii*), which is invasive. Grow 18 inches to 4 feet and bloom anywhere from late spring to late summer. Large, spreading plant with lush, green foliage and large, fringed flowers. Full sun. Best in well-drained, alkaline soil. Good for large areas where it can spread. **Zone 3**



Cranesbill (*Geranium sp.*) Many species and varieties – do not confuse with Thunberg's geranium (*Geranium thunbergii*), which is invasive. Attractive, full, mounded plant growing 6 inches to 2 feet and spreading. Geranium-shaped leaves occur in different sizes, depending on variety, and most have attractive red color in fall. Numerous bright flowers held above the foliage in shades of white, pink, red, purple and blue. Most bloom all summer. Easy to grow. Sun to part-sun. Moist, well-drained soil. Some varieties are tolerant of more moisture, or dry soil, or shade. Many make good ground covers. Check with nursery for your specific needs. **Zones 3 to 5**



Creeping Phlox (*Phlox stolonifera*) Grows to 8 inches. Low, spreading plant forms dense ground cover. Profuse, fragrant, early spring flowers in shades of white, blue and pink. Part-sun to shade. Moist, well-drained soil. Good in woodland settings and semi-shaded areas. **Zone 3 Native**

Culver's Root (*Veronicastrum virginicum*) Grows 3 to 7 feet with handsome whorls of slender leaves and long spikes of tiny, white to pink to blue, tube-like flowers in late summer. May be slow to establish. Good for moist meadows and woods. Sun to part-sun. Moist soil. **Zone 3 Native**

Cushion Spurge (*Euphorbia epithymoides*) Grows 12 to 18 inches. Long-lived, spreading clumps form a dense mound. Dark-green leaves are somewhat fleshy and turn red in fall. Covered with bright-yellow flowers in spring and summer. (Milky sap from stems can cause irritation in sensitive people.) Easy to grow. No maintenance. Full sun. Any well-drained soil. Tolerates dry soil. **Zone 3**



Daisy (*Chrysanthemum X superbum & C. rubellum*) Many species and varieties of daisies are available but these (Shasta Daisy and Hybrid Red Chrysanthemum) are best suited to the natural planting. Both are vigorous and spreading. Both do best in full sun and rich, moist soil. *C. rubellum* is compact and branching, grows 2 to 3 feet and has masses of large, fragrant, pink to red, daisy-like flowers in late summer. Tolerates some shade. Hardy to **Zone 5**. Shasta Daisy is available in several varieties. Most grow 2 to 3 feet ('Little Princess' grows to only 12 inches) with deep-green foliage and large, white, daisy-like flowers. Prefer well-drained soil. **Zone 4**

Daylily (*Hemerocallis sp.*) Many, many varieties available. Heights vary from 15 inches to 4 feet. Long, narrow, lily-like leaves form large clumps. Large, fragrant, lily-like flowers in many shades of white, yellow, orange, pink and red. Bloom for long periods during the summer. Hardy and easy to grow. Good for naturalizing. Sun to part-sun. Moist, well-drained soil. Heat and drought tolerant. Also tolerates wet soil. **Zone 3**

Evening Primrose (*Oenothera sp.*) Also called Sundrops. Several species available. Spreading, somewhat shrubby plants, growing 6 inches to 2 feet. Smaller varieties can be useful as ground covers. Profuse, bright-yellow (some white to pink) flowers throughout summer. Sun to part-sun. Well-drained soil (some do best in poor, sandy, dry soil). **Zones 4 to 5 Native**

False Lupine (*Thermopsis caroliniana & lanceolata*) Grows 2 to 4 feet and resembles a sprawling lupine. Attractive, blue-green foliage and tall spikes of yellow flowers in summer. Easy to grow and long-lived. Good in natural plantings. Sun to part-sun. Moist soil. Tolerates drought. **Zone 3**





False Sunflower (*Heliopsis scabra*) Grows to 3 feet. A showy, informal plant with golden sunflower-like flowers in summer. Easy to grow. Good in natural plantings. Sun to part-sun. Moist soil. Tolerates some drought and poor soil. **Zone 3**

Fleabane (*Erigeron speciosus*) Varieties are cultivated from native species. Grows 2 to 3 feet. A sturdy plant good for natural plantings. Clusters of large, pink to purple, daisy-like flowers in summer. Sun best. Tolerates some part-sun. Sandy, well-drained, poor soil. **Zone 4 Native**

Foamflower (*Tiarella sp.*) Forms clumps 6 to 12 inches high with low, broad leaves, either lobed or heart-shaped. Leaves turn bronze in fall. Some are slow-growing; others rapid. Profuse airy, white to pink flowers on long stalks in late spring to summer. Part-sun to shade. Moist, rich soil. Tolerates wet. Low-maintenance ground cover for woodland areas. **Zone 4 T. cordifolia is Native**

Forget-Me-Not (*Myosotis sp.*) Native and non-native species available. *M. scorpioides* is invasive. A somewhat short-lived perennial but will self-seed and become well-established if given the right conditions. Form clumps 6 to 18 inches high with many, small, clear-blue flowers in early spring to summer. Sun to part-sun. Moist soil. Some do well with more shade and moisture, good in woodland settings. **Zone 3 (Native)**

Germander (*Teucrium chamaedrys*) Standard and dwarf varieties are available. The standard is shrubby and compact and grows 1 to 2 feet tall. The dwarf grows 6 to 10 inches tall and spreads to 3 feet, making a good ground cover. Both are aromatic and have shiny, green leaves and small, pinkish-purple flowers late in summer. Full sun best but tolerates some shade. Any well-drained soil. **Zone 5**

Globeflower (*Trollius sp.*) Several species and varieties available. Grows 1 to 3 feet with large, white to yellow to orange, buttercup-like flowers on stems above the mounded leaves. Bloom in spring or summer. Vigorous. Sun to part-sun. Moist to wet, cool soil. Do well in semi-shaded, boggy areas and pond edges. **Zone 3**

Globe Thistle (*Echinops ritro*) Grows 2 to 4 feet. Coarsely divided leaves are whitish underneath. Large, ball-shaped, steely-lavender-blue flower heads on long stems in late summer. Easy to grow. Full sun. Dry soil. Tolerates drought. **Zone 3**

Goat's Beard (*Aruncus sp.*) Shrub-like perennials, forming large clumps over time, but not invasive. Both standard and dwarf species available. Standard grows to 5 feet with 2 to 3 foot compound leaves and large, feathery, creamy-white plumes of flowers in summer. Dwarf form grows to 12 inches with deeply cut leaves and creamy flowers. Sun to part-sun. Moist soil. **Zone 4 A. dioicus is Native**

Goldenrod (*Solidago sp.*) Several varieties available. Grow 2 to 4 feet with varying forms and foliage. Bright golden-yellow clusters or plumes of flowers in late summer and fall. Vigorous plants; some can become invasive. Good in natural plantings. Good for butterflies and bees. Do not cause hayfever. Full sun. Moist, well-drained soil. Tolerate dry soil. **Zone 3 Native**



Heather (*Calluna sp.*) Check hardiness before using this one. In an appropriate, protected spot, this can be a good ground cover. Evergreen, spreading mound with tiny, sharp, needle-like leaves and lots of tiny white to purple flowers in summer to fall. Full sun. Moist, well-drained, peaty, acid soil. May tolerate dry soil. May need winter protection. **Zone 4**

Helen's Flower (*Helenium autumnale & bigelovii*) Also called Sneezeweed. Varieties developed from native species. Adaptable, sturdy and informal. Good in natural plantings. Grows 3 to 5 feet in clumps with narrow leaves and numerous, showy, daisy-like flowers in yellow to bronze. Blooms late summer to fall. Full sun. Moist soil. Tolerates wet soils. **Zone 3 (Native)**

Horehound (*Marrubium vulgare*) A bushy, erect herb growing 1 to 2 feet high. Vigorous and spreading. Crinkled, wooly, highly aromatic, grayish-green leaves and small, white flowers close to the stem. Not



native but has become naturalized in many areas. Full sun. Any well-drained soil. Does well in poor, dry, sandy soil. Can be used as a tall ground cover. **Zone 3**

Hosta (*Hosta sp.*) Also called Plaintain Lily. Many species and varieties available. Grow 6 inches to 3 feet. Lush, leafy plants slowly spreading in clumps. Foliage comes in all shades of green with many variegated forms. Flowers are white to purple in clusters on very short or very long stalks. Bloom in summer. Easy to grow. Many uses, from hedges to ground covers to fillers under trees and shrubs. Sun to shade; do best in part-sun to shade. Moist soil. **Zone 3**

Hyssop (*Hyssop officinalis*) Beautiful, semi-bushy, aromatic herb growing 2 to 3 feet with small, shiny, dark-green leaves and long spikes of profuse, fragrant, tiny, blue flowers late summer to fall. Attracts bees and butterflies. Reseeds vigorously. Sun to part-sun. Moist, well-drained soil. **Zone 3**

Indian Cucumber-root (*Medeola virginiana*) Grows to 1 foot. Several nodding, yellowish-green flowers emerge from the center of a whorl of 3 leaves at the top of a slender, woolly, unbranched stem. The root is white, has a brittle texture, and tastes and smells somewhat like a cucumber. Birds are attracted to the fruit. At the time the berries turn bluish-purple, the cluster of leaves below them turn red at the lower half. Part sun to shade. Moist soil. **Zone 3 Native**

Iris (*Iris sp.*) Several species and varieties available. Do not choose Yellow Iris (*I. pseudacorus*), which is invasive. Grow 3 inches to 4 feet in height, depending on the variety. Plants spread by rhizomes and have long, slender, sword-like leaves and unique, showy flowers, ranging from white to yellow, pink, bronze, purple and blue. Some are highly fragrant. Flowers occur late spring to summer. Sun to part-sun. Most prefer moist, well-drained soil and tolerate some drought. Some require more moisture. Look for easy-care varieties. Some are native. **Zones 3 to 5 Blue Flag Iris (*I. versicolor*) is Native**



Jack-in-the-Pulpit (*Arisaema triphyllum*) Grows from 1 to 2 feet high with a spread of 1 to 1½ feet. Unusually shaped and striped “flower” in mid-spring; clusters of brilliant red berries in fall. Typically grows in wet woodland areas and may take 5 years to flower if grown from seed. Roots are poisonous. Prefers medium wet to wet rich organic soils and partial to full shade. **Zone 3 Native**

Jacob’s Ladder (*Polemonium caeruleum & reptans*) Also called Greek Valerian. Grows 1 to 3 feet. *P. caeruleum* is larger and forms clumps while *P. reptans* is smaller and spreads to form a ground cover. Delicate, light-green, fern-like foliage and loose clusters of white, blue or purple flowers in late spring to summer. Part-sun. Prefers cool, moist soil, some wet. Good at woodland edges. *P. reptans* is native to New England but probably not to Maine. There are other species native to Maine. **Zone 3 (Native)**

Jewelweed (*Impatiens capensis*) Also called Touch-Me-Not. This is a native plant that may not be available at nurseries but can be spread by seed and occurs naturally in moist to wet, shaded locations. Do not confuse with Ornamental jewelweed (*I. glandulifera*), which is invasive. The native plant grows 2 to 5 feet with light-green succulent stems and leaves like cultivated *Impatiens*. Spotted orange flowers hang on slender stems beneath the leaves. Blooms in summer. Ripe seedpods pop open when touched. Part-sun to shade. Moist to wet soil. **Zone 3 Native**

Joe-Pye Weed (*Eupatorium purpureum & maculatum*) Native species are called Sweet-Scented Joe-Pye Weed (*E. purpureum*) and Spotted Joe-Pye Weed (*E. maculatum*). Grows 4 to 7 feet. Vigorous, spreading into large clumps. Should be careful where plant – generally cannot be removed once established. A large plant with large, coarse, vanilla-scented leaves and large, showy clusters of dull pink to purple flowers in late summer and fall. Stems are very rugged, even when dry. Attracts deer. Sun to part-sun. Moist to wet soil. Good in wet, natural plantings. **Zone 3 Native**

Jupiter’s Beard (*Centranthus sp. or Valeriana sp.*) Avoid Garden heliotrope (*Valeriana officinalis*), which is invasive. Vigorous, bushy plants growing 2 to 3 feet high with green to blue-green leaves and showy clusters of small, fragrant, white to deep-red flowers in summer. Spreads by self seeding. Full to part-sun. Poor, moist, well-drained soil. Does not like acidic soil. **Zone 4**



Lady's Mantle (*Alchemilla mollis*) Other species and varieties are available but this one is probably best for a natural planting. Grows 12 to 18 inches and forms large, mounded, spreading clumps. Useful as a ground cover. Large, rounded, semi-lobed, gray-green leaves and masses of small, bright, yellow, star-shaped flowers that bloom in early summer. Sun to part-sun. Moist, well-drained soil. **Zone 3**

Lamb's Ears (*Stachys byzantina & officianalis*) Also called Betony or Woundwort. Several varieties with differing shades of foliage and flowers or no flowers. Grows 8 to 20 inches depending, on variety. All have large, soft, velvety, gray, silver to green foliage. Spread to form clumps or mats. Some varieties make good ground covers. Some are non-blooming, others have spikes of small pink to purple flowers. Sun to part-sun. Moist, well-drained soil. Tolerates some shade if soil is on the dry side. **Zone 4**

Lamiaeum (*Lamiaeum galeobdolon or Galeobdolon luteum*) Also called Yellow Archangel and Golden Deadnettle. Grows 1 to 2 feet high and spreads. Striking silver splashes on foliage and dense clusters of yellow flowers in spring. Useful as a ground cover and for naturalizing in difficult shady areas. Can be invasive. Part-sun to shade. Any well-drained soil. **Zone 3**

Lavender (*Lavandula angustifolia*) Grows 1 to 2 feet. A bushy, evergreen perennial with narrow, gray-green, fragrant foliage and spikes of fragrant, purple flowers in summer. Leaves and flowers used for their fragrance. Full sun. Moist, rich, well-drained soil. Tolerates sandy soil. **Zone 5**

Lemon Balm (*Melissa officianalis*) Bushy herb grows 2 to 3 feet high and spreads by seed and underground. Deeply-veined, heart-shaped, shiny, light-green, lemon-scented leaves and small, white flowers throughout summer. Used for teas and fragrances. Easy to grow. Attracts honeybees. Sun to part-sun. Rich, well-drained soil. **Zone 4**



Ligularia (*Ligularia sp.*) Grows 3 to 5 feet with large, decorative, toothed or deeply cut leaves up to 20 inches wide and loose clusters or tall spikes of yellow or orange daisy-like flowers in summer. Large, dramatic plants. In some, the undersides of the leaves are bronze or purple and some have black or purple stems. Need moist, cool locations. Do well near bogs, streams and ponds. Part-sun to shade. Rich, moist soil. Tolerates wet soil. **Zone 4**

Lily (*Lilium sp.*) Many species and varieties available. Grow 2 to 4 feet tall. Look for long-lived, easy-care (i.e., ones that do not need staking or need to be divided regularly) varieties. Some are spreading and can fill in areas nicely, coming up through grass and weeds. Turk's Cap Lily is good for naturalizing. Flowers are typical lily flowers in a wide variety of colors and shapes. Many are fragrant. Bloom summer to fall. Sun to part-sun. Moist, well-drained soil. **Zones 3 to 5**



Lily of the Valley (*Convallaria majalis*) Grows 6 to 12 inches with 8 inch long, deep-green leaves and extremely fragrant, bell-shaped, white flowers hanging along the stems. Blooms in spring. Spreads underground to form a ground cover in cool, moist, shaded areas. Good in woodland settings. Part-sun to shade. Moist soil. **Zone 3**

Lily-turf (*Liriope spicata*) Rapidly-spreading, grass-like lily. Grows 8 to 18 inches in mounds. Deep-green foliage is evergreen and may need winter protection from ice. Clusters or spikes of light-purple flowers in summer, followed by black berries. Easy ground cover. Holds well on slopes. Sun to shade. Tolerates a variety of soils; best if well-drained. Tolerates poor soil and drought and wet soil. **Zone 4**

Lungwort (*Pulmonaria sp.*) Several varieties available, varying in flower color and leaf variegation. Grow 9 to 18 inches in spreading clumps. A good ground cover in cool, moist areas. Lush foliage is green and speckled with white or silver in most varieties. Loose clusters of white, pink, blue or purple flowers open in early spring with or before the foliage. Part-sun. Moist to wet, well-drained soil. **Zone 3**

Lupine (*Lupinus perennis*) Wild Lupine. Cultivated hybrids are also available but not as long-lived unless very well established. Wild forms will reseed in natural settings. Do not confuse with *L. polyphyllus*, which has naturalized along Maine roadsides and is considered invasive by many. Vigorous



plants grow 1 to 2 feet (hybrids somewhat taller). Form attractive mounds of interesting, palmately lobed leaves with tall, upright spikes of blue, pink, red, white or yellow flowers. True wild lupine usually occurs in blue but other colors have been developed. Sun to part-sun. Acid, well-drained soil best. Tolerates poor, dry conditions once established. **Zone 4 (Native)**

Mallow (*Malva sp.*) Several species and varieties available. Grows 2 to 4 feet. An informal, free-flowering, somewhat shrubby plant. Deeply lobed to feathery foliage and clusters of large white to pink flowers throughout summer into fall. Good for naturalizing; self-seeds readily and forms large patches. Full sun. Dry, alkaline soil. Tolerates drought. Not native but has become naturalized. **Zone 4**



Marsh Marigold (*Caltha palustris*) Grows from 8 inches to 2 feet high with a spread of approximately 1 foot. Typically found in swamps and marshes and is recommended for planting along stream banks, in bog gardens and near ponds. Bright yellow flowers bloom in late spring to early summer. Prefers wet organic soils and partial to full sun. **Zone 3 Native**

Masterwort (*Astrantia major*) Several varieties available. Grows 18 inches to 3 feet tall and spreads quickly. Clusters of greenish-white to rose-pink to crimson-red flowers in summer to fall. Easy to grow and reliable if given plenty of moisture. Part-sun to shade. Moist, rich soil; high in organic matter. **Zone 4**

Meadow Rue (*Thalictrum sp.*) Several species and varieties, native and non-native. Graceful plant with airy, fern-like foliage and loose clusters of delicate flowers with a fluffy appearance in spring and summer. Grows 3 to 5 feet. Forms loose clumps. Foliage ranges from light-green to bluish-green and flowers range from white to yellow to light-purple. Good at edges of woods and water. Sun to part-sun. Some varieties do best in part-sun. Rich, moist soil. Some tolerate wet soil. **Zones 3 to 5 Tall Meadow Rue (T. polygamum) is Native**

Meadowsweet (*Filipendula sp.*) Several species are available, differing in flower color and tolerance of dry soil. Grow 2 to 6 feet. Easy to grow, require little care as long as there is plenty of moisture. Good in natural settings. Attractive, divided leaves; some fern-like. Masses of white, pink or red, fluffy flower clusters in summer. Sun to part-sun. Moist to wet soil. Does *not* like acidic soil. **Zone 4**

Milkweed (*Asclepias incarnata* & *A. syriaca*) Also called Swamp Milkweed (*A. incarnata*) and Common Milkweed (*A. syriaca*). Vigorous, upright plant with narrow foliage and fragrant, white or pink flowers that attract butterflies. Grows 3 to 4 feet and blooms in summer. Easy to grow. Interesting seedpods. Spreads easily by seed. Good for naturalizing wet areas. Full sun. Dry to wet soil. **Zone 3 Native**



Moss Phlox (*Phlox subulata*) Also called Moss Pink. Grows 4 to 9 inches high in a spreading mat or mound. Makes a good ground cover in sunny, well-drained areas. Short, needle-like leaves and masses of blue, white or pink flowers in spring. Sun to part-sun. Sandy, well-drained soil best. Native west of Maine; naturalized here. **Zone 3**

Obedient Plant (*Physostegia virginiana*) Slender, upright plant grows 2 to 4 feet high and spreads rapidly. Good in natural settings where it can spread but can be very aggressive. A dwarf form is available which only grows to 18 inches. Varieties that spread less vigorously also have been developed. Narrow, coarse leaves and long spikes of showy, white, pink or purple flowers in late summer. Sun to part-sun. Acidic, moist soil. Tolerates wet soil. **Zone 3 Native**

Oregano (*Origanum vulgare*) Grows to 18 inches in a spreading, trailing mat. Small, highly aromatic leaves and clusters of tiny white to purple flowers in summer. Plant parts used as flavoring in cooking. Good ground cover for small areas. Full sun. Well-drained, non-acidic soil best. **Zone 3**

Pachysandra (*Pachysandra terminalis*) Also called Japanese Spurge. Several varieties available, differing in color of leaves and growth habit. Grows 6 to 12 inches and spreads underground. Glossy, green leaves, some variegated and spikes of white flowers in late spring. An excellent ground cover for shaded areas. Part-sun to shade. Moist, well-drained





soil. Best with high organic matter. **Zone 4**

Pearly Everlasting (*Anaphalis margaritacea*) Other cultivated species are available. Slender plant grows to 2 feet with narrow, gray-green, woolly leaves and masses of small, white flowers in late summer. Flowers used for drying. Native and extremely drought tolerant. Full sun. Moist to dry soil. **Zone 3 Native**

Periwinkle (*Vinca minor*) Also called Myrtle. Several varieties available with different flower colors and growth heights. The standard species is the hardiest. A trailing, spreading, evergreen plant growing to 10 inches high with glossy, dark-green leaves and white, blue or lavender flowers in spring. An excellent, hardy, long-lived ground cover that has become naturalized in our area. Sun to shade. Moist, well-drained soil. Does not do well in drought. **Zone 4**

Phlox (*Phlox paniculata*) Also called Garden Phlox. There are other species and varieties of Phlox that also would do well in natural plantings (Wild Sweet William *P. maculata* & Woodland Phlox *P. divaricata*). Grows 2 to 4 feet in large clumps. Large, pyramid-shaped clusters of extremely fragrant flowers in many shades of white, pink, lilac and red. Summer-blooming. Full sun. Moist, rich soil. Has become naturalized in our area. **Zone 3**



Plume Poppy (*Macleaya cordata*) Large, handsome plants grow 5 to 10 feet tall. Spreads rapidly in good conditions. Large, rounded and lobed, gray-green leaves with silver undersides and long, creamy, white plumes of feathery flowers in summer. Easy to grow. Grow where there is room to spread. Sun to part-sun. Moist soil, well-drained soil. **Zone 3**

Potentilla (*Potentilla sp.*) Also called Cinquefoil. Several varieties and species; some spreading and some not. Look for ones that make good ground covers. Easy to grow. Grow from 3 to 18 inches, either erect or sprawling, depending on variety. Three to five-lobed foliage may be semi-evergreen and is often woolly. Bright flowers in spring or summer are red, apricot or yellow. A good choice is *P. tabernaemontani*. It forms a 6 to 9 inch high, spreading, evergreen mat with yellow spring flowers. Sun to part-sun. Tolerates a variety of soils. Light, sandy soil best. **Zone 5**

Pussy-toes (*Antennaria dioica*) Low, 1 inch high, gray-green or silver basal leaves and 3 to 8 inch flower stalks. Rapidly spreads to form a mat. Clusters of small, white or pink, fuzzy flowers on stalks in spring. Makes a good ground cover in sunny, dry, poor areas where little else will grow. Full sun. Dry soil. **Zone 3**

Sage (*Salvia sp.*) Several species and varieties available with different growth habits and soil requirements. Look for ones that do not require winter mulching or other special care. Several are tolerant of heat and drought. Grow from 1 to 4 feet depending on variety. Dark-green, blue-green or gray-green, aromatic leaves and spikes of pink to purple flowers in summer or fall. Form slowly spreading clumps. Full sun. Moist to dry, well-drained, acid soil best. Some are drought tolerant. **Zones 3 to 5**

Sedum (*Sedum sp.*) Also called Stonecrop. Many species and varieties available, differing in growth height and flower color. Easy to grow; many spreading to form mounds or ground covers. Grow from 2 to 24 inches with succulent leaves and profuse clusters of white, pink, red or yellow flowers. Bloom time varies from spring to summer with many having long bloom times lasting into fall. Attract butterflies. Full sun best but some tolerate part-sun. Most prefer fertile, well-drained soil but many tolerate poor, dry soil and many tolerate drought and heat. Good ground covers for sunny, rocky or sandy areas. **Zone 3**

Silverweed (*Argentina anserina*) Grows to 6 inches. Solitary, 1 in., five-petaled, yellow flowers are held on slender stems above basal tufts of pinnate, silvery foliage. In ancient times, was grown for food and medicine. Full sun. Will grow in seasonally moist to periodically dry soil and in excessively drained soil and is drought resistant. **Zone 4 Native**



Skullcap (*Scutellaria sp.*) Several species; some native and some not. Grows 1 to 2 feet and spreads. Slender plant with bright-green leaves and numerous, small, deep-blue flowers sometimes in spikes and sometimes close to the stem. Bloom summer to fall. Part-sun. Rich, moist to wet soil. **Zone 4**

Snow-in-Summer (*Cerastium tomentosum*) Grows 6 to 8 inches in spreading mounds. Easy to grow; spreads quickly. Small, silvery leaves and masses of small, white flowers in late spring and summer. Full sun. Must have well-drained soil. Some varieties grow in pure sand. **Zone 3**

Solidaster (*Solidaster luteus*) A cross between aster and goldenrod. Grows 18 to 30 inches. Large, bushy plants with small, narrow leaves and masses of small, yellow, daisy-like flowers in summer. Good for naturalizing. Full sun. Moist, well-drained soil. **Zone 5**



Solomon's Seal (*Polygonatum sp.*) Three species available, varying in height from 18 inches to 7 feet. Some are native. Handsome plants with lily-like leaves along an arching stem and white, bell-shaped flowers hanging below leaves in late spring. Some are fragrant. Excellent in woodland settings. Spread underground. Part-sun to shade. Moist, acid soil. Tolerates wet. Shady, damp woods best. **Zone 3 P. pubescens is Native**

Spikenard (*Aralia racemosa*) Grows to 3 feet. Large, tapered flower clusters are made up of many tiny white flowers, each with a tinge of yellow or green. They grow upright above large compound foliage on heavy, leafy stems. Purple-red berries are showy in fall. Good for back of border. Partial sun to shade. Moist to seasonally moist/seasonally dry soil. **Zone 3 Native**

Sunflower Heliopsis (*Heliopsis helianthoides*) Also called False Sunflower and Oxeye. Several varieties available. Grows 3 to 6 feet. Low-maintenance, hardy plants form clumps but do not spread. Coarse, dark-green leaves and showy, yellow to gold, sunflower-like flowers (2 to 3 inches across) summer to fall. Good in natural plantings. Full sun. Moist, well-drained soil best but tolerates drought and poor soils. Native to northern midwest. **Zone 3**



Sweet Flag (*Acorus calamus*) This is a native plant that may not be easy to find at nurseries but would make a valuable addition to a shoreline, wet area planting. It grows 1 to 4 feet tall with long, sword-like leaves and a dense spike of small, tightly-packed, greenish-yellow flowers along the stem. Full to part-sun. Wet soil. Does well on stream and pond edges. **Zone 3 Native**

Sweet Woodruff (*Galium odoratum* or *Asperula odorata*) Grows 9 to 12 inches and spreads rapidly. Small, fragrant, glossy-green leaves in whorls around the slender, many-branched stems. Loose clusters of small, white, star-shaped, fragrant flowers in spring and summer. Makes a good ground cover in moist, shady areas. Part-sun to shade. Moist, well-drained soil. **Zone 4**

Swordleaf Inula (*Inula ensifolia*) Vigorous, low-maintenance plant growing 1 to 2 feet in spreading clumps. Slender, pointed, rich-green leaves and numerous, bright, golden-yellow, daisy-like flowers in summer. Full sun. Any moist, well-drained soil. Tolerates wet soil. **Zone 3**

Thin-leaved Sunflower (*Helianthus decapetalus*) Vigorous, spreading, native, sunflower-like plant. Grows 3 to 5 feet high with large, coarse leaves and large, yellow sunflower-like flowers in late summer. Good for natural plantings. Full sun. Moist, well-drained soil. **Zone 3 Native**



Thyme (*Thymus sp.*) Several varieties of low, spreading, aromatic herbs. Grow 2 to 12 inches, depending on variety. Small, shiny leaves and masses of tiny rose to purple clusters of flowers in spring or summer. Good ground covers for sunny, dryish areas. Some varieties tolerate high traffic. Best in full sun and well-drained, acid soil. Tolerates part-sun. **Zone 4**

Tickseed (*Coreopsis sp.*) Several species and varieties available; some native to the Midwest and naturalized here. Reliable and easy to grow. Some are spreading and some are drought resistant. Grow 8 to 36 inches. Have lobed to fern-like to thread-like, well-branched foliage and masses of brilliant to soft



yellow to orange to pink daisy-like flowers in spring and summer. Most are long-blooming. Full sun. Moist, well-drained soil. Some tolerate drought. Good in natural plantings. **Zone 3**

Trout-lily (*Erythronium americanum*) Also called Dog's-tooth-violet. Trout Lily refers to the similarity between the brown-mottled leaf markings and those of the brown or brook trout. Flowers are nodding, yellow inside, bronzy outside. Colony-forming. Grows to 6 inches. Flowers early in spring. Partial sun to shade. Moist soil. **Zone 3 Native**

Turtlehead (*Chelone sp.*) *Chelone glabra* (white turtlehead) is native; *C. lyonii* & *obliqua* are not. Grow 2 to 4 feet high with coarse, dark-green leaves and long-blooming spikes of snapdragon-like flowers in white to pink to red. Bloom summer to fall. Spread to form patches. Found in wet areas along streams and lakes. Full to part-sun. Rich, acidic, moist to wet soil. **Zone 4 White turtlehead (C. glabra) is Native**

Veronica (*Veronica sp.*) Also called Speedwell. Many species and varieties available. Avoid European Speedwell (*V. beccabunga*), which is invasive. Reliable, hardy, easy to grow. Grow from 6 to 24 inches; many form clumps; many good as ground covers. Foliage is usually dense and ranges from silvery-gray to glossy, dark-green. Flowers occur in clusters or spikes of numerous small flowers in shades of white, pink, purple and blue. Many bloom from spring to fall. Full to part-sun. Moist, well-drained soil. Nice, versatile plant. **Zones 3 to 5**

Violet (*Viola sp.*) Many species and varieties available; some are native. Grow 3 to 12 inches and spread under proper conditions. Bright-green, heart-shaped, oval or divided leaves and numerous, unique flowers in spring. Occur in many colors; some bicolor; many fragrant. Good in moist, woodland settings. Full to part-sun. Moist, fertile, well-drained soil. Spread best in semi-shaded locations. Good ground cover. **Zones 3 to 5 Marsh Blue Violet (V. cucullata) and Round-leaved Violet (V. rotundifolia) are Native**



Virginia Bluebells (*Mertensia virginica* & *siberica*) Easy to grow, woodland plant. Clump-forming plants grow 1 to 2 feet high with delicate, gray-green leaves and drooping clusters of sky-blue, bell-shaped flowers. Some die back after blooming so need to be planted with plants that will fill in the area through the summer. Part-sun to shade. Rich, moist soil. **Zone 3**

White Clover (*Trifolium repens*) New Zealand is best variety for durability. Hardy and long-lived; spreads quickly once established. Grows to 8 inches with typical, 3-lobed leaves and small, white blossoms in summer. Good in steep areas and areas with high foot-traffic. Sun to part-sun. Moist soil. Tolerates heavy clay soils, heat and excessive moisture. Does not do as well in sand. **Zone 3**

Wild-oats (*Uvularia sessilifolia*) Grows to 6 inches. The stalks of this perennial are usually two-branched and bear oval, lily-like leaves. Delicate, cream-colored flowers may be single or paired, hang bell-like on short auxiliary stems, and bloom in early spring. Part sun to shade. Moist soil. **Zone 3 Native**

Wild Ginger (*Asarum sp.*) Native and non-native species available. Should not be collected from the wild. Found in moist, rich woods. Grows 4 to 8 inches high with large, glossy, heart-shaped leaves and a single, inconspicuous, reddish-brown cup-shaped flower close to the ground. Grown mostly for its leaves as a woodland ground cover. Spreads underground. May need protection from competition until established. Part-sun to shade. Rich, moist, well-drained soil. **Zones 3 to 4 (Native)**

Wintercreeper Euonymus (*Euonymus fortunei*) Several varieties available. Dense, leafy, spreading ground cover. Grows 3 to 20 inches high and some can spread up to 5 feet. Glossy, green leaves; some variegated; some turn purple in winter. Insignificant flowers. Full sun to shade. Moist soil. **Zone 4**

Wintergreen (*Gaultheria procumbens*) Also called Checkerberry. Low, native, evergreen, slow-creeping ground cover. Grows 3 to 6 inches. Small, glossy, bright-green, wintergreen-tasting leaves; small, white to pink, bell-shaped flowers in spring, followed by wintergreen-tasting red berries that persist into winter.



Leaves turn red in fall. Good in woodland settings. Part-sun to shade. Moist, acid, sandy or peaty soil best. **Zone 3 Native**

Yarrow (*Achillea sp.*) Several species and varieties available. Grow 6 to 36 inches with fragrant, fern-like foliage. Taller varieties better for natural plantings. Easy to grow, forming large clumps. Numerous, small flowers in showy, rounded or flat-topped clusters ranging in color from white to shades of yellow, pink and red. Full sun. Well-drained soil. Drought tolerant. **Zone 3**



FERNS, GRASSES & VINES

Plant Name	Zone	Sun	Part Sun	Shade	Wet	Moist	Dry	G/C	Native
Ferns									
Christmas Fern	3		X	X		X			X
Cinnamon Fern	3	X	X	X	X	X			X
Hay-scented Fern	3		X	X		X	X	X	X
Interrupted Fern	4		X	X	X	X			X
Lady Fern	4		X	X		X			X
Long Beech Fern	3		X	X		X		X	X
Maidenhair Fern	3		X	X		X			X
Marginal Wood Fern	3	X	X			X	X		X
Ostrich Fern	3		X	X	X	X			X
Royal Fern	3	X	X	X	X	X			X
Sensitive Fern	3	X	X	X	X	X			X
Spinulose Wood Fern	3		X	X		X	X		X
Grasses									
Bulrushes	3-4	X	X		X				X
Bur-Reed	3	X	X		X				X
Big Bluestem	3	X				X	X	X	X
European Dunegrass	4	X					X	X	
Native Manna Grasses	4	X			X			X	X
Reed Grass	3	X			X	X			X
Switch Grass	3-5	X				X	X	X	X
Vines									
American Bittersweet	4	X	X			X	X		X
Boston Ivy	4	X	X			X	X	X	
English Ivy	4	X	X	X		X	X	X	
Fox Grape	4	X				X			X
Sweet Pea	3	X	X			X	X	X	
Virginia Creeper	3	X	X	X		X	X	X	X
Virgin's Bower	3	X	X			X			X



FERNS

Christmas Fern (*Polystichum acrostichoides*) Grows 1 to 2 feet. Evergreen fern with once-divided, leathery, dark-green foliage. Forms large clumps, 2 to 3 feet across. Good on rocky, woodland hillsides. Part-sun to shade. Moist, well-drained soil. **Zone 3 Native**

Cinnamon Fern (*Osmunda cinnamomea*) Grows to 3 feet. Vigorous, spreading to form large, vase-shaped clumps. Large, doubly-divided fronds are light-green in spring and dark-green by fall. Fertile fronds are fuzzy, cinnamon-brown. Very hardy. Full sun to shade. Moist, acid, highly organic soil best. Only tolerates full sun if plenty of moisture. **Zone 3 Native**

Hay-scented Fern (*Dennstaedtia punctiloba*) Vigorously spreading fern grows to 12 inches with light-green, finely-divided fronds. Foliage sweet-scented when crushed. Versatile fern grows in many soils and tolerates drought. Found in clearings and on rocky slopes. Part-sun to shade. Moist, well-drained soil. Drought tolerant. **Zone 3 Native**

Interrupted Fern (*Osmunda claytoniana*) Grows 3 to 4 feet in large, vase-shaped clumps. Pale-green fronds not as deeply divided as Cinnamon Fern. Green, sterile portions of fronds are 'interrupted' along the stalk with brown, fertile portions. Part-sun to shade. Moist, acid soil. Good, woodland fern. **Zone 4 Native**

Lady Fern (*Athyrium felix-femina*) One of the only ferns offered in different varieties. Grows in clumps 2 to 3 feet tall with lacy, pale-green, arching fronds. Found in moist, partly-shady areas but tolerates more sun and dry soil than most ferns. Part-sun to shade. Moist, rich soil best. **Zone 4 Native**

Long Beech Fern (*Phegopteris connectilis*) Grows to 6 inches. Smaller size fern, low growing. Spreads well. Partial shade to shade. Moist soil conditions. Found naturally in strongly to moderately acid soil, or on rocks in shaded rock crevices. **Zone 3 Native**

Maidenhair Fern (*Adiantum pedatum*) Grows to 18 inches. Delicate fronds with make nearly perfect circles, with dark, shiny stems. This graceful, fan-like pattern is unique among native ferns. The fronds arise from a creeping rootstock in clusters. Tolerates alkaline soil. Part-shade to shade. Moist soil. **Zone 3 Native**

Marginal Wood Fern (*Dryopteris marginalis*) Grows to 2 feet. Easy to grow. Fronds are blue-green. Tolerates rocky sites. Full sun to partial shade. Drought resistant. Will tolerate seasonally moist and periodically dry conditions, as well as excessively drained soils. The blue-green leaves can last through the winter. **Zone 3 Native**

Ostrich Fern (*Matteucia struthiopteris*) Known for its fiddleheads in the spring. Grows to 4 feet. Large, upright, coarse-textured fronds. Found in swamps and moist woods. Part-sun to shade. Rich, moist to wet soil. **Zone 3 Native**

Royal Fern (*Osmunda regalis*) Beautiful, stately, vigorous fern with branching, pale to bright-green fronds, depending on the amount of light. Grows 2 to 6 feet (tallest in wet conditions). Spreads slowly. Full sun to shade. Best in part-sun to shade. Wet soils but not submerged. **Zone 3 Native**

Sensitive Fern (*Onoclea sensibilis*) Interesting fern with completely separate fertile fronds often used in dried arrangements. Grows 1 to 2 feet in moist soil. Fronds pale to deep-green and twice-divided with fertile fronds brown with persistent, bead-like spore cases along the stalk. Full sun to shade. Moist to almost wet soil. **Zone 3 Native**

Spinulose Wood Fern (*Dryopteris carthusiana*) Grows to 2 feet. Has lacy fronds and is reddish in the spring. Fronds arise in vase-like cluster. Part-shade to shade. Tolerates moist soil and seasonally moist, periodically dry soil. **Zone 3 Native**



GRASSES



Bulrushes (*Scirpus sp.*) Many species of tall (4 to 6 feet high) grass-like plants with long, narrow leaves and striking flower heads; some with dark-brown 'spikelets' and others fluffy. Found in wet areas and shallow water. Full to part-sun. Wet soil, standing water. **Zones 3 to 4 Native**

Bur-Reed (*Sparganium sp.*) A family of grass-like plants growing 1 to 4 feet high in shallow water with either upright or floating stems and long, narrow leaves. Flowers are greenish-brown and followed by a bur-like ball. Full to part-sun. Wet soil, standing water. **Zone 3 Native**

Big Bluestem (*Andropogon gerardi*) A versatile group of grasses; this species tolerant of dry, poor conditions. Long-lived, grows 3 to 6 feet tall with lush green leaves that turn red in fall and bluish-purple stems. Flower and seed heads branch into 3 parts. Needs extra care to get established but forms excellent cover once established. A common prairie grass. Full sun. Moist to dry soil. Tolerates poor, dry, sandy soil. **Zone 3 Native**

European Dunegrass (*Elymus glaucus*) Native to western America. Grows to 2 feet. Vigorously spreading, ornamental grass. Good for erosion control on sandy, dune areas. Tolerates drought and salt. Good for bank stabilization. Highly aggressive. Blue-gray, arching foliage and green to yellow flower clusters in late summer. Full sun. Well-drained, sandy soil. **Zone 4**

Native Manna Grasses (*Glyceria striata*, *G. Canadensis*, *G. grandis*, *G. borealis*, *G. melicaria*) There are several native manna grasses – Fowl (*G. striata*), Rattlesnake (*G. canadensis*), American (*G. grandis*), Small Floating (*G. borealis*), and Melic (*G. melicaria*) manna grass. **Do not confuse with Reed mannagrass (*G. maxima*), which is extremely invasive and should not be planted.** Spreading, cultivated grass for damp areas. Grows to 3-5 feet with slender, arching, green foliage and inconspicuous green flowers and inconspicuous red fruits or seeds. Most active growth period is in the spring. Leaves are not retained year to year. Native species grow in marshes, shallow water and wet areas. Full sun. Wet soil. **Zone 4 Native**

Reed Grass (*Calamagrostis canadensis*) Also called Canada Bluejoint Grass. Other species and varieties are available. Grows 2 to 4 feet. A typical, upright, attractive grass. Spreads slowly to form clumps. Some varieties are more vigorous. Slender stems and flower heads. Does well in wet soil and is a good soil stabilizer. Full sun. Moist, fertile soil. Good near water. **Zone 3 Native**

Switch Grass (*Panicum virgatum*) Several varieties. Grows 4 to 7 feet in thick, spreading clumps. Good for wildlife and birds. Typical long, narrow leaves and decorative, feathery flower heads. Holds shape throughout winter. Needs 1 or 2 years to become established. Full sun. Tolerates poor, acid, sandy, dry soil. Heat and drought tolerant. **Zones 3 to 5 Native**



VINES



American Bittersweet (*Celastrus scandens*) Climbing vine. A high-climbing or sprawling woody vine. Do not confuse with Asiatic bittersweet (*C. orbiculatus*), which is very invasive. Deciduous leaves are simple, ovate and dark-green; greenish-yellow in fall. Small, greenish flowers are followed by a showy, orange capsule that splits open to expose a red, poisonous, berry-like fruit. The fruit is held in drooping clusters. Tolerates alkaline soil. Sun to part-sun. Moist to dry soil. **Zone 4 Native**

Boston Ivy (*Parthenocissus tricuspidata veitchi*) Dense, climbing or sprawling vine with maple leaf-shaped, glossy, dark-green leaves that turn crimson in the fall. Tolerates dry conditions once established. Sun to part-sun. Moist to dry soil. **Zone 4**

English Ivy (*Hedera helix*) Low-maintenance, dense, evergreen vine with broad, glossy, dark-green leaves. Many varieties are available. It climbs things or trails along the ground. Sun to shade. Moist to dry soil. Tolerates some drought. **Zone 4**

Fox Grape (*Vitis labrusca*) Has handsome foliage and edible grapes, at times with a musky flavor. Concord Grapes are a cultivator of this native grape species. Good vine for arbors and fences. Full sun. Moist soil. **Zone 4 Native**

Sweet Pea (*Lathyrus latifolius*) Vigorous, flowering vine good on rocky slopes. Easy to grow once established. Forms a 2 to 3 foot thick mat of vegetation making it good for erosion control on poor, sandy or rocky slopes. Also good food and cover for birds and wildlife. Typical pea-like vines and leaves and long-blooming, showy white to pink to red flowers. Blooms summer to fall. Sun to part-sun. Moist, well-drained soil best but tolerates poor, sandy, clayey soils. **Zone 3**

Virginia Creeper (*Parthenocissus quinquefolia*) Also called Woodbine. Rapid growth. Spreads vigorously; can be invasive. Good as ground cover over rocky slopes. Deep-green, palmately-divided leaves turn crimson in fall. Bluish, black berries in fall. Good for birds. Sun to shade. Adaptable to most soils. **Zone 3 Native**

Virgin's Bower (*Clematis virginiana*) A climbing vine that can grow up to 20 feet high. Grows best in soil with average to medium moisture and full sun to partial shade. Attractive clusters of silky seeds follow showy white flowers. Grows best on a trellis or fence. **Zone 3 Native**

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DIVISION OF ANIMAL AND PLANT HEALTH

Chapter 273: CRITERIA FOR LISTING INVASIVE TERRESTRIAL PLANTS

SUMMARY: This chapter establishes criteria to be used in evaluating non-native terrestrial invasive plants which are offered for sale or import in Maine that could have adverse economic and/or ecological impacts in Maine. This chapter also establishes the list of evaluated plants that meet the criteria and prescribes the restrictions on the distribution and sale of those plants.

I. Definitions

- A. **Biological potential** - The ability of a species to increase its numbers, either sexually and/or asexually, and occupy more space.
- B. **Ecoregion** – An ecoregion is a geographic area where ecosystems are generally similar. Ecoregion maps are published by the US Environmental Protection Agency.
- C. **Invasive plant** - A non-native species that has spread into native or minimally managed plant communities (habitats) in Maine that causes economic or environmental harm by developing self-sustaining populations that become dominant and/or disruptive to native species.
- D. **Minimally managed habitats** - Minimally managed habitats are habitats where management efforts and investments of time, money and labor are infrequent or nonexistent. These habitats may at one time have been intensively managed. Minimally managed habitats may include, but are not limited to forests, woodlots, rights-of-way, riverbanks, coastal plains, pastures, meadows and vacant lots.
- E. **Native plant** - A species that has evolved over hundreds or thousands of years in a particular ecoregion. Generally, only plants found in this country before European settlement are considered native to the United States.
- F. **Naturalized plant** - A non-native plant that does not need human help to reproduce and maintain itself over time in an area where it is not native.
- G. **Non-native plant** - A species that is not native or naturally occurring (based on its distribution and current knowledge of the species) within Maine. A species may be native to North America, but non-native in Maine.
- H. **Spatial gaps** - This term is used in reference to the ability of a species to disperse away from existing occurrences. It is a distance from the location of the original introduction of a plant which exceeds the average distance a propagule (seed or other viable plant part) from that plant would normally establish. The longer distance movement (over a spatial gap) and establishment is facilitated by wind, water, animals or some other reason. This

type of growth contrasts with a plant that spreads contiguously and undispersed within a habitat.

- I. **Species** - As utilized in this chapter, "species" includes all synonyms, subspecies, hybrids, varieties, forms and cultivars of that species.
- J. **Invasive terrestrial plant species of special concern** - A non-native plant species that has spread into native or minimally managed plant habitats in Maine that may cause economic or environmental harm. Species of special concern may be effectively contained through alternative regulatory measures instead of prohibiting sale or import.
- K. **Terrestrial plant** – As utilized in this chapter, “terrestrial plant” includes plants that grow in upland habitats but may also include plants that are able to grow in wetlands or as emergent aquatic plants. Terrestrial plants may grow in agricultural fields, rangelands, forests, urban landscapes, wildlands, and along waterways. Terrestrial plants include trees, shrubs, vines, grasses and herbaceous plants.

II. **Criteria for Evaluating Terrestrial Plant Species**

In order to include a plant on a list of invasive terrestrial plant species administered by the Maine Department of Agriculture, Conservation and Forestry the following criteria must be met:

- A. Be non-native to Maine, and
- B. Have the potential for rapid growth, dissemination and establishment in minimally managed habitats, and
- C. Have the biological potential for widespread dispersion and for dispersing over spatial gaps, and
- D. Have the biological potential for existing in high numbers or large colonies in minimally managed habitats, and
- E. Have the potential to displace native species in minimally managed habitats.

III. **Prohibitions and restrictions**

No person shall import, export, buy, sell, or intentionally propagate for sale or distribution any living and viable portion of any plant species, which includes all of their cultivars, varieties and hybrids, listed in Section V.

IV. **Transition**

The effective date for prohibition or restriction of the plants listed in Section V that are already growing in Maine or in the channels of trade in Maine at the time this rule is adopted are indicated in the Section V list of regulated invasive terrestrial plant species.

V. List of Regulated Invasive Terrestrial Plant Species

Evaluated plant species that meet the criteria for all of the categories listed in section II.

Scientific name	Common name	Effective Date
<i>Acer ginnala</i>	Amur maple	1/1/2018
<i>Acer platanoides</i>	Norway maple	1/1/2018
<i>Aegopodium podagraria</i>	Bishop's weed, goutweed	1/1/2018
<i>Ailanthus altissima</i>	Tree of heaven	1/1/2018
<i>Alliaria petiolata</i>	Garlic mustard	1/1/2018
<i>Amorpha fruticosa</i>	False indigo bush	1/1/2018
<i>Ampelopsis glandulosa</i>	Porcelain berry	1/1/2018
<i>Artemisia vulgaris</i>	Common mugwort	1/1/2018
<i>Berberis thunbergii</i>	Japanese barberry	1/1/2018
<i>Berberis vulgaris</i>	Common barberry	1/1/2018
<i>Celastrus orbiculatus</i>	Asiatic bittersweet	1/1/2018
<i>Elaeagnus umbellata</i>	Autumn olive	1/1/2018
<i>Euonymus alatus</i>	Winged euonymus, burning bush	1/1/2018
<i>Euphorbia cyparissias</i>	Cypress spurge	1/1/2018
<i>Fallopia baldschuanica</i>	Chinese bindweed, silver lace vine	1/1/2018
<i>Fallopia japonica</i>	Japanese knotweed	1/1/2018
<i>Frangula alnus</i>	Glossy buckthorn	1/1/2018
<i>Hesperius matronalis</i>	Dame's rocket	1/1/2018
<i>Impatiens glandulifera</i>	Ornamental jewelweed	1/1/2018
<i>Iris pseudacorus</i>	Yellow iris	1/1/2018
<i>Ligustrum vulgare</i>	Common privet	1/1/2018
<i>Lonicera japonica</i>	Japanese honeysuckle	1/1/2018
<i>Lonicera maackii</i>	Amur or bush honeysuckle	1/1/2018
<i>Lonicera morrowii</i>	Morrow's honeysuckle	1/1/2018
<i>Lonicera tatarica</i>	Tartarian honeysuckle	1/1/2018
<i>Lythrum salicaria</i>	Purple loosestrife	1/1/2018
<i>Microstegium vimineum</i>	Stilt grass	1/1/2018
<i>Paulownia tomentosa</i>	Paulownia, princess tree	1/1/2018
<i>Persicaria perfoliata</i>	Mile a minute weed	1/1/2018
<i>Phellodendron amurense</i>	Amur cork tree	1/1/2018
<i>Populus alba</i>	White cottonwood	1/1/2018
<i>Robinia pseudoacacia</i>	Black locust	1/1/2018
<i>Rosa multiflora</i>	Multiflora rose	1/1/2018
<i>Alnus glutinosa</i>	European alder	1/1/2024
<i>Angelica sylvestris</i>	Woodland angelica	1/1/2024
<i>Anthriscus sylvestris</i>	Wild chervil, raven's wing	1/1/2024
<i>Aralia elata</i>	Japanese angelica tree	1/1/2024
<i>Butomus umbellatus</i>	Flowering rush	1/1/2024

<i>Elaeagnus angustifolia</i>	Russian olive	1/1/2024
<i>Euonymus fortunei</i>	Wintercreeper, climbing spindle tree	1/1/2024
<i>Festuca filiformis</i>	Fine-leaved sheep fescue	1/1/2024
<i>Ficaria verna</i>	Lesser celandine	1/1/2024
<i>Glaucium flavum</i>	Yellow hornpoppy	1/1/2024
<i>Glechoma hederacea</i>	Ground ivy, creeping charlie	1/1/2024
<i>Glyceria maxima</i>	Great mannagrass, reed mannagrass	1/1/2024
<i>Hippophae rhamnoides</i>	Sea buckthorn	1/1/2024
<i>Ligustrum obtusifolium</i>	Border privet	1/1/2024
<i>Lonicera xylosteum</i>	Dwarf honeysuckle	1/1/2024
<i>Lythrum virgatum</i>	European wand loosestrife	1/1/2024
<i>Miscanthus sacchariflorus</i>	Amur silvergrass	1/1/2024
<i>Petasites japonicus</i>	Fuki, butterbur, giant butterbur	1/1/2024
<i>Phalaris arundinacea</i>	Reed canary grass, variegated ribbon grass	1/1/2024
<i>Photinia villosa</i>	Photinia, christmas berry	1/1/2024
<i>Phragmites australis</i>	Common reed	1/1/2024
<i>Phyllostachys aurea</i>	Golden bamboo	1/1/2024
<i>Phyllostachys aureosulcata</i>	Yellow groove bamboo	1/1/2024
<i>Pyrus calleryana</i>	Callery ("Bradford") pear	1/1/2024
<i>Ranunculus repens</i>	Creeping buttercup	1/1/2024
<i>Rubus phoenicolasius</i>	Wineberry	1/1/2024
<i>Silphium perfoliatum</i>	Cup plant	1/1/2024
<i>Sorbus aucuparia</i>	European mountain-ash	1/1/2024
<i>Tussilago farfara</i>	Coltsfoot	1/1/2024
<i>Valeriana officinalis</i>	Common valerian	1/1/2024

VI. Variances

- A. A variance may be granted by the State Horticulturist to allow for importation and field experimentation of invasive plants listed in Section V for scientific, educational, or other purposes under conditions prescribed by the State Horticulturist. Any variance(s) shall be in the form of a permit issued by the State Horticulturist.
- B. Preserved specimens in the form of herbaria or other preservation means are exempt from this rule.
- C. Varieties, cultivars, hybrids and/or subspecies that have been shown not to be invasive through scientific research and analysis may be considered exempt from this rule after review by a committee established by the Department.
 1. Data submitted must include sources with no financial interest in the species, such as universities, agricultural experiment stations, cooperative extension, USDA or botanical gardens; and
 2. Regulatory status in nearby states shall also be considered.

VII. Species Watch List

Evaluated plant species that do not currently meet all the criteria contained in section II but may meet those criteria within the next five years. These species are not subject to the prohibitions in Section III.

Scientific Name	Common Name
<i>Actinidia arguta</i>	Hardy kiwi
<i>Akebia quinata</i>	Chocolate vine; five-leaf akebia
<i>Arum italicum</i>	Italian arum
<i>Broussonetia papyrifera</i>	Paper mulberry
<i>Buddleja davidii</i>	Butterfly bush
<i>Clematis terniflora</i>	Yam-leaved virgin's bower, sweet autumn
<i>Dioscorea oppositifolia</i>	Indian yam
<i>Dioscorea polystachya</i>	Chinese yam
<i>Eragrostis curvula</i>	Weeping lovegrass
<i>Filipendula ulmaria</i>	Queen of the meadow
<i>Lespedeza bicolor</i>	Bicolor lespedeza, two-colored bush-clover
<i>Ligustrum ovalifolium</i>	California privet
<i>Lonicera caerulea</i>	Honeyberry, haskap
<i>Lychnis flos-cuculi</i> or <i>Silene flos-cuculi</i>	Ragged robin
<i>Morus alba</i>	White mulberry
<i>Quercus acutissima</i>	Sawtooth oak
<i>Rosa rugosa</i>	Rugosa rose, beach rose
<i>Saccharum ravennae</i> or <i>Triplidium ravennae</i>	Ravenna grass, hardy pampas grass
<i>Salvia glutinosa</i>	Sticky sage
<i>Silybum marianum</i>	Milk thistle
<i>Spiraea japonica</i>	Japanese spiraea
<i>Symplocos paniculata</i>	Sapphire-berry
<i>Syringa reticulata</i>	Japanese tree lilac
<i>Toona sinensis</i>	Chinese cedar
<i>Ulmus pumila</i>	Siberian elm
<i>Viburnum dilatatum</i>	Linden arrowwood
<i>Viburnum sieboldii</i>	Siebold viburnum
<i>Wisteria floribunda</i>	Japanese wisteria
<i>Wisteria sinensis</i>	Chinese wisteria

VIII. Invasive Terrestrial Plant Species of Special Concern

Scientific Name	Common Name
<i>Rosa rugosa</i>	Rugosa rose, beach rose

IX. Invasive Terrestrial Plant Species of Special Concern – Conditions governing sale or display of species of special concern.

- A. An invasive terrestrial plant species of special concern that is sold or offered for sale in Maine shall have attached in a conspicuous place on the container used to hold the invasive terrestrial species of special concern, and where no container is used on the plant itself, a label with the words Invasive Species-Harmful to the Environment in at least 14-point bold type. Where it is impracticable to display a label, written notice shall be provided upon sale to the purchaser. The label or written notice shall be of a design approved by the Department of Agriculture, Conservation and Forestry and shall offer alternative non-invasive species and provide instructions for the care or tending of the invasive species to prevent their spread in the State.
- B. In lieu of the label required under Chapter 273, Section IX. A., above, the retail outlet may post a sign or signs identifying the plants as invasive terrestrial species of special concern. The sign or signs must be conspicuous and unobstructed and appear at no less than six-foot intervals around the listed plants. The sign specifications include:
1. The sign must be 8.5inches tall and 11 inches wide;
 2. The sign must be made of rigid, weather resistant material and be maintained to last during the entire time that species of special concern are offered for sale;
 3. The sign must have lettering in at least 40-point type in the Arial font or similar sans serif font;
 4. The sign must be light colored (white, beige, yellow or pink) with dark, bold letters (black, blue or green); and
 5. The sign must include the following wording, “Invasive Plant – May be Harmful to the Environment”, “Ask About Alternative Plants”, and “Follow Species Specific Instructions Provided by the Vendor”.
- C. The plant vendor must provide species specific guidance at the time of sale to notify the purchaser about the invasive potential of the species and what habitat types to avoid when installing the plant.
- D. No person selling or offering for sale an invasive terrestrial plant species of special concern shall conceal, detach, alter, deface, or destroy any label, sign, or notice required under this section.
- E. The effective date for plants listed in Section IX that are already growing in Maine or in the channels of trade in Maine at the time this rule is adopted shall be 1/1/2024.

X. Periodic Review

The plant lists in Section V, VII and VIII may be reviewed and amended on a five-year basis unless a person petitions the Department with significant scientific research and analysis that, in the Department’s determination, warrants review for possible amendment to the list at an earlier date.

STATUTORY AUTHORITY:

7 M.R.S.A. Chapter 405-A Section 2211

EFFECTIVE DATE:

December 25, 2011 – filing 2011-469

CORRECTIONS:

February, 2014 – agency names, formatting

AMENDED:

January 14, 2017 – filing 2017-003

May 24, 2022 – filing 2022-092 (reordered and posted 10-13-2022)



Bulletin #2500, Gardening to Conserve Maine's Native Landscape: Plants to Use and Plants to Avoid

 extension.umaine.edu/publications/2500e

Originally developed by Extension Ornamental Horticulture Specialist, Lois Stack, University of Maine Cooperative Extension with Judy Hazen Connery, Natural Resource Program Manager, Acadia National Park.

Reviewed and updated by University of Maine Cooperative Extension staff, 2023 and 2025.

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VIDEO: Native Plants in Maine (YouTube)

Maine's Native Landscape

Maine's landscape offers spectacular variety, with ocean beaches, lakes, rivers, mountains, fields, and forests. Maine is locally influenced by both coastal and inland weather patterns. This creates relatively mild areas, and areas that are almost arctic, all within the state's 300-mile length and 200-mile width. Maine rises from sea level to over 5,000 feet in elevation at the top of Mount Katahdin. This wide range of elevation results in a diversity of habitats including flat sandy plains, rolling hills, rounded summits, and craggy mountains with sheer cliffs. Maine's forests vary from spruce and fir near the coast to hardwoods in the western hills, and mixed hardwood/softwood forests in the North. More than 100 types of habitats have been identified with about 1,500 native plant species spread across the state's varied landscape.

What Are Native Versus Non-native Plant Species, and Why Should I Care?

Native plants are species that either originated or arrived in a specific region without human intervention, perhaps thousands of years ago. **Non-native species** were brought intentionally for horticultural or other uses, or came accidentally in ships' ballast, crop seed or in soil. Some non-native plants continue to escape from cultivation and become naturalized in wetlands, lakes, woods, fields, or roadsides.

Native plants are essential to local ecosystems because they have co-evolved with native insects and wildlife, often serving as their primary or exclusive food source. As habitat and food resources for native insects, birds, and mammals continue to shrink, incorporating native plants into your landscape helps support biodiversity by creating vital food corridors and habitat. Biodiversity is crucial for maintaining resilient ecosystems and sustaining life on Earth.

In addition to their ecological benefits, native plants enhance Maine's natural landscape, one of our most important resources, with their subtle beauty and are often well-adapted to challenging site conditions.

What are Invasive Plants and Why Should I Care?

According to the Maine Natural Areas Program, “[a]n **invasive plant** is defined as a plant that is not native to a particular ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health. There are currently approximately 2,100 plant species recorded from Maine. Approximately one-third of those are not native. Of those plants that are not native, only a small fraction is considered invasive, but these have the potential to cause great harm to our landscape.”

Invasive plants are a threat because they typically have one or more of the following survival strategies:

- A lack of natural predators and diseases. These population control mechanisms are often left behind when non-native plants are moved to new places.
- Some have the capacity to produce copious amounts of seed. For example, a single purple loosestrife plant can produce three million seeds in a single season!
- Efficient seed dispersal mechanisms/adaptations can allow invasives to move over long distances. Japanese barberry and burning bush are two examples of plants invading Maine's forests because birds consume the fruit and deposit the seeds far from the parent plant.
- Leaves may emerge earlier in the season and/or remain later into the fall compared to their native counterparts, lending competitive advantage or shading competitors. This is easily noticeable in the spring when spotting non-native honeysuckles or burning bush growing along roadsides.
- Lastly, many invasives have the ability to grow in a wide range of sun and soil conditions which may allow them to outcompete their native counterparts.

When invasive species degrade habitat for native plants and animals, they diminish the availability of food and habitat for wildlife and alter the behavior of native animals such as pollinators, plant-eating insects and fruit-eating birds. Unchecked, invasives could drive

some species to extinction. This is why invasive plants are a major concern to people who want to protect native species and natural areas.

Plants to Avoid

The Maine Department of Agriculture, Conservation and Forestry (DACF) Horticulture Program, in collaboration with a stakeholder committee, maintains three invasive plant lists.

1. The *Do Not Sell Invasive Plant List* includes terrestrial plant species that are “illegal to import, export, buy, sell or intentionally propagate for sale.”
2. A *Watch List* has been curated to highlight plants that don’t currently meet the criteria to be included in the “Do Not Sell List,” but have raised enough concern to warrant continued evaluation in the future. Plants in this list can be sold without restrictions.
3. *Plants of Special Concern* is a designation established for plants that “may be invasive in some habitats and alternative plants should be considered.” Plants in this category can still be sold, but will require special labeling.

Lastly, the DACF Maine Natural Areas Program maintains an *Advisory List* that is intended for educational and land management purposes. This is not a regulatory list, but is a helpful tool for assessing risks associated with plants that have not fallen under the scope of the current regulations.

All of the above mentioned lists can be found on this website:
maine.gov/dacf/php/horticulture/invasiveplants.shtml#list

What Can You Do to Help?

- Be familiar with the *Do Not Sell Invasive Plant List*, *Watch List* and *Plants of Special Concern*. Occasionally, roadside plant sales, garden centers and even online vendors are not fully in compliance with the law, so it’s important that consumers play an active role in knowing what plants should be avoided.
- Gently educate “generous” gardening friends whom you may witness sharing invasive plants with others.
- Grow plants that do not “jump the fence” or escape from your garden.
- Try growing native plants as ornamentals and as food for birds and pollinators.
- Eliminate invasive non-natives from your yard and garden. Remove the plant, including roots, and dispose of it in a way that does not allow it to spread to a new site.
- Urge your garden center managers to expand their selection of propagated native plants.

VIDEO: [How to Get Rid of Invasive Plants \(YouTube\)](#)

Looking for Native Plants at Your Garden Center

Many of the plants in the Native Plant Recommendations list below are available at local garden centers, where professionals can help you with plant selection. Wild Seed Project's Where to Buy Native Plants list can help point you to some places to shop. wildseedproject.net/blog/where-to-buy-native-plants.

While you're shopping, ask the vendor if their native plants are nursery-propagated. If the nursery cannot guarantee that its native plants are nursery-propagated, purchase your plants elsewhere.

Collecting plants, cuttings, seeds or sods from the wild can devastate natural populations. Some species are vulnerable to over collecting and some simply will not survive being transplanted. Also, leaving open disturbed soil in natural areas can allow those sites to be colonized by weedy or invasive species.

The following is by no means a comprehensive list of native plants. Instead, it's a selection of species that are relatively easy to find and have attributes that make them well-suited for managed landscapes. For additional plant lists, visit our Pollinator-Friendly Garden Certification program page for a curated list of native plant resources.

Key to Light and Moisture Abbreviations



Light:

F=full sunlight

P=partial shade

S=shade



Moisture:

H=hydric; wet, periodically or often inundated by water

M=mesic; moist, adequate soil moisture all year



S=sub-xeric; moist to dry, seasonally moist but periodically dry

X=xeric; dry, little soil moisture retention, excessively well drained

Native Plant Recommendations

Trees | Shrubs | Vines and Ground Covers | Perennials: Flowering Plants | Perennials: Ferns

Trees



NAME					
Common	Scientific			Height	Comments
Balsam fir	<i>Abies balsamea</i>	F,P	M	75'	Open growth in hot, dry locations; evergreen; coastal trees susceptible to adelgids
Red maple, Swamp maple	<i>Acer rubrum</i>	F,P	M	60'	Excellent fall color; tolerates wet spring soils
Sugar maple, Rock maple	<i>Acer saccharum</i>	F,P	M	75'	Excellent orange-red fall color; beautiful large shade tree
Mountain maple	<i>Acer spicatum</i>	F,P	M	30'	Good for naturalizing
Yellow birch	<i>Betula alleghaniensis</i>	F,P	M	100'	Does best in cool soils and cool summers; beautiful bark; long lived
Paper birch	<i>Betula papyrifera</i>	F	M	70'	Beautiful white bark year-round; tolerates poor, dry soils
Gray birch	<i>Betula populifolia</i>	F	M	40'	Does well in poor soils; good for naturalizing

American hornbeam, Blue-beech	<i>Carpinus caroliniana</i> <i>spp. virginiana</i>	F	M	30'	Good for naturalizing; tolerates periodic flooding
Cockspur hawthorn	<i>Crataegus crus-galli</i>	F	M	30'	Glossy green leaves; 2" thorns; persistent dark red fruits
Larch, Hackmatack, Tamarack	<i>Larix laricina</i>	F	H,M	80'	Good in well-drained and moist-to-wet naturalized sites
Black gum, Black tupelo	<i>Nyssa sylvatica</i>	F,P	M	50'	Excellent yellow-orange fall leaf color
American hop-hornbeam	<i>Ostrya virginiana</i>	F,P	M,S	40'	Slow to establish after transplanting; good medium-sized tree
White spruce, Cat spruce	<i>Picea glauca</i>	F,P	M	60'	Good specimen or windbreak; evergreen
Black spruce	<i>Picea mariana</i>	F,P	M	40'	Tolerates wet sites; evergreen
Jack pine	<i>Pinus banksiana</i>	F	S,X	50'	Useful for windbreaks or mass plantings in sandy soil; evergreen

Red pine, Norway pine	<i>Pinus resinosa</i>	F	S,X	80'	Good windbreak; tolerates dry soils well; evergreen
White pine	<i>Pinus strobus</i>	F	M,S	80'	Handsome specimen; not tolerant of salt; evergreen
Bigtooth aspen	<i>Populus grandidentata</i>	F	M,S	70'	Fast growing, short lived; good yellow fall leaf color
Quaking aspen, Trembling aspen	<i>Populus tremuloides</i>	F	M	50'	Fast growing, short lived; good yellow fall leaf color
Pin cherry, Fire cherry, Bird cherry	<i>Prunus pensylvanica</i>	F	M	35'	Adaptable; fast growing; tolerates poor soil; susceptible to disease
Black cherry	<i>Prunus serotina</i>	F	M	60'	Interesting black bark; white flowers in spring; wildlife food source; susceptible to disease
White oak	<i>Quercus alba</i>	F	M	80'	Large tree; transplant when young
Northern red oak	<i>Quercus rubra</i>	F	M	75'	Transplants readily; good fall red leaf color

Black willow	<i>Salix nigra</i>	F	H,M	35'	Tolerates wet soils; twigs can cause lawn litter
American mountain-ash	<i>Sorbus americana</i>	F	M	30'	Fruit eaten by wildlife
Showy mountain-ash	<i>Sorbus decora</i>	F	M	30'	Fruit eaten by wildlife
Pagoda dogwood	<i>Swida (Cornus) alternifolia</i>	F,P	M	25'	Moist soil is important; white flowers in early June
Northern white-cedar, Arborvitae	<i>Thuja occidentalis</i>	F,P	M	60'	Useful hedge or specimen plant; tolerates alkaline soil; susceptible to deer browse
Basswood, American linden	<i>Tilia americana</i>	F,P	M	80'	Large tree; tolerates alkaline soil; good for urban landscape
Eastern hemlock	<i>Tsuga canadensis</i>	F,P,S	M	70'	Graceful evergreen; does not tolerate drought or windy sites; susceptible to adelgids on coast

Shrubs

NAME					
Common	Scientific			Height	Comments

Downy serviceberry, Downy shadbush	<i>Amelanchier arborea</i>	F,P	M	25'	Useful in edible and wildlife landscapes; excellent orange fall color
Eastern serviceberry	<i>Amelanchier canadensis</i>	F,P	M	20'	Useful in edible and wildlife landscapes; yellow-gold fall color
Smooth serviceberry, Allegheny serviceberry	<i>Amelanchier laevis</i>	F,P	M	25'	Useful in edible and wildlife landscapes; leaves are bronze in spring
Bog rosemary	<i>Andromeda polifolia</i> var. <i>glaucophylla</i>	F,P	H	1-2'	Leathery evergreen leaves; requires very moist acid soil
Buttonbush	<i>Cephalanthus occidentalis</i>	F	H	6'	Good for wetland plantings
Sweet-fern	<i>Comptonia peregrina</i>	F,P	S,X	3'	Aromatic foliage; interesting texture; good in dry sandy soil
Gray dogwood	<i>Swida (Cornus) racemosa</i>	F,P,S	M	15'	Spreads by suckering stems; many birds eat its white fruits in fall

Red-osier dogwood	<i>Swida (Cornus) sericea</i>	F	H,M	6'	Red stems attractive in winter; spreads by suckering stems; tolerates wet soil
American hazelnut	<i>Corylus americana</i>	F,P	M	15'	Good for naturalizing; fruit eaten by wildlife; tolerates alkaline soil
Bush cinquefoil	<i>Dasiphora floribunda (Potentilla fruticosa)</i>	F	M,S,X	4'	Good summer-flowering shrub; tolerates alkaline soil
Bush-honeysuckle	<i>Diervilla lonicera</i>	S,P	M	5'	Spreads by suckering stems; very hardy, adaptable
Leatherwood	<i>Dirca palustris</i>	S	M	4'	Yellow fall color; thrives in moist, shady sites
Common witchhazel	<i>Hamamelis virginiana</i>	F,P	M	15'	Avoid droughty sites; yellow flowers in October; yellow fall leaf color
Winterberry, Black-alders	<i>Ilex verticillata</i>	F,P	H,M	10'	Bright red fruits persist into midwinter; excellent wetland plant



Common juniper	<i>Juniperus communis</i> var. <i>depressa</i>	F	M,S,X	3'	Tolerates drought, wind, sterile or alkaline soils; evergreen
Sheep, laurel, Lambkill	<i>Kalmia angustifolia</i>	F,P	M,S	3'	Adaptable to many soils; best in very acid soil; good for naturalizing
Northern bayberry	<i>Morella caroliniensis</i> (<i>Myrica pensylvanica</i>)	F,P	S,X	6'	Good for massing; useful in poor soil sites; aromatic foliage
Sweetgale	<i>Myrica gale</i>	F	S,X	4'	Bushy plant; dark green foliage; aromatic foliage
Black chokeberry	<i>Aronia (Photinia) melanocarpa</i>	F,P	H,M,S	6'	Spreads by suckering stems; wine-red fall color; good wildlife plant in wet or dry soils
Beach plum	<i>Prunus maritima</i>	F	M,S	6'	Good for edible landscape; salt-tolerant
Choke-cherry	<i>Prunus virginiana</i>	F	M	30'	Spreads by suckering stems; white flowers in spring; wildlife food source
Rhodora	<i>Rhododendron canadense</i>	F,P	H,M	3'	Magenta flowers in spring; best in very acid soil

Labrador tea	<i>Rhododendron (Ledum) groenlandicum</i>	F,P	H,M	3'	Transplants well; good for moist-to-wet naturalized sites
Staghorn sumac	<i>Rhus hirta (R. typhina)</i>	P	M,S,X	25'	Spreads by suckers; good mass plant for dry slopes
Meadow rose	<i>Rosa blanda</i>	F	M	5'	Spreads by suckering stems; single light pink flowers; red hips in fall and winter
Pasture rose	<i>Rosa carolina</i>	F	M	5'	Pink single flowers in midsummer; small red hips persist into winter
Virginia rose	<i>Rosa virginiana</i>	F	M,S	5'	Spreads by suckering stems; good in dry and seaside sites; good barrier/hedge
Pussy willow	<i>Salix discolor</i>	S	H,M	15'	Fuzzy flowers in early spring; good for naturalizing; tolerates wet soil
Black elderberry	<i>Sambucus nigra</i> subsp. <i>canadensis</i>	F	M	12'	Useful in edible landscape; tolerates alkaline soil

Red elderberry	<i>Sambucus racemosa</i> subsp. <i>pubens</i>	F	M	20'	Flowers in mid to late July; handsome red fruit in midsummer
Gray dogwood	<i>Swida (Cornus) racemosa</i>	F,P,S	M	15'	Spreads by suckering stems; many birds eat its white fruits in fall
Red-osier dogwood	<i>Swida (Cornus) sericea</i>	F	H,M	6'	Red stems attractive in winter; spreads by suckering stems; tolerates wet soil
Canadian yew	<i>Taxus canadensis</i>	P,S	M	6'	Hardest yew; good for naturalized shady landscape; evergreen
Highbush blueberry	<i>Vaccinium corymbosum</i>	F	M	8'	Good for edible or wildlife landscapes; best in very acid soil
Mapleleaf viburnum	<i>Viburnum acerifolium</i>	P,S	M,S	6'	Suckering; good for mass plantings in shady sites
Hobblebush	<i>Viburnum lantanoides</i> (<i>V. alnifolium</i>)	P,S	M	8'	Open shrub; good for naturalized landscape

Arrowwood viburnum	<i>Viburnum dentatum</i> <i>var. lucidum</i>	F,P	M	15'	Durable; good for hedges; tolerates alkaline soil
Nannyberry	<i>Viburnum lentago</i>	F,P	M,S	15'	Good for wildlife and naturalized landscapes
Witherod, Wild-raisin	<i>Viburnum nudum</i> <i>var. cassinoides</i>	S,P	M	10'	Excellent fall foliage and fruit color
Highbush cranberry	<i>V. opulus</i> <i>var. americanum</i> (<i>V. o. var. trilobum</i>)	F,P	M	12'	Excellent for screening; good for wildlife landscapes



Vines and Ground Covers

NAME					
Common	Scientific			Height	Comments
Running serviceberry	<i>Amelanchier spicata</i> (<i>A. stolonifera</i>)	F,P	M	2'	Stoloniferous groundcover; forms thickets
Bearberry	<i>Arctostaphylos uva-ursi</i>	F,P	S,X	6"	Best in poor, sandy, very acid soils; salt-tolerant; groundcover
American bittersweet	<i>Celastrus scandens</i>	F,P	M,S	—	Climbing vine; separate male and female plants; tolerates alkaline soil

Bunchberry	<i>Chamaepericlymenum canadensis</i> (<i>Cornus canadensis</i>)	P,S	M	6"	Spreading groundcover; white flowers in spring; red fruit in fall
Virgin's bower	<i>Clematis virginiana</i>	F	M	—	Climbing vine; white flowers in late summer; best in alkaline soil
Checkerberry, Wintergreen	<i>Gaultheria procumbens</i>	P,S	M	6"	Evergreen groundcover; leaves fragrant when crushed; reddish in fall
Creeping juniper	<i>Juniperus horizontalis</i>	F	M,S,X	1' or less	Adaptable; tolerates hot, dry sites and alkaline soil; evergreen
Partridgeberry	<i>Mitchella repens</i>	S	M	2"	Delicate plant; red fruits persist into winter
Woodbine, Virginia creeper	<i>Parthenocissus quinquefolia</i>	F,P,S	M,S,X	—	Vigorous vine; tough; maroon fall color; tolerates alkaline soil
Lowbush blueberry	<i>Vaccinium angustifolium</i>	F	M	2'	Slow; good for edible or wildlife landscapes; requires acid soil

Large cranberry	<i>Vaccinium macrocarpon</i>	F	H,M	6"	Slow; good for edible or wildlife landscapes; requires acid soil
Fox grape	<i>Vitis labrusca</i>	F	M	—	Handsome foliage; good vine for arbors and fences



Perennials: Flowering Plants

NAME					
Common	Scientific			Height	Comments
White baneberry; Red baneberry	<i>Actaea pachypoda, A. rubra</i>	P,S	M	24"	Attractive, but poisonous fruits
Columbine	<i>Aquilegia canadensis</i>	F,P,S	M,S	12"	Early spring flowers
Spikenard	<i>Aralia racemosa</i>	P,S	M,S	36"	Good for back of border
Silverweed	<i>Argentina anserina</i>	F	S,X	6"	Yellow flowers, silvery leaves
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	P,S	H,M	12"	Flower green and brown; bright red fruits
Milkweed	<i>Asclepias syriaca</i>	F	S,X	36"	Flowers attract bees; monarch butterflies lay eggs on leaves
Marsh marigold	<i>Caltha palustris</i>	F,P	H,M	12"	Showy yellow flowers in early spring

Harebell	<i>Campanula rotundifolia</i>	F,P	M,S,X	12"	Delicate blue-purple flowers
Blue cohosh	<i>Caulophyllum thalictroides</i>	P,S	M,S	36"	Blue fruits; back of border
White turtlehead	<i>Chelone glabra</i>	P,S	H,M	24"	Interesting white flowers in midsummer
Bluebead-lily	<i>Clintonia borealis</i>	P,S	M,S	12"	Pale yellow flowers; fruits poisonous
Trout-lily, Dog's-tooth-violet	<i>Erythronium americanum</i>	P,S	M	6"	Flowers early spring
Boneset	<i>Eupatorium perfoliatum</i>	F	H,M	24"	Green flowers; good for drying
Joe-pye weed	<i>Eutrochium (Eupatorium) maculatum</i>	F	H,M	48"	Purple flowers in fall; attracts pollinators; good for drying
Blue flag	<i>Iris versicolor</i>	F,P	H,M	24"	Elegant form; blue-purple flowers; easy to grow
Indian cucumber-root	<i>Medeola virginiana</i>	P,S	M	12"	Interesting magenta floral bracts
Obedient plant	<i>Physostegia virginiana</i>	F,P,S	M,S,X	24"	Flowers pink, leaves dark green; good cut flower

Solomon's seal	<i>Polygonatum pubescens</i>	P,S	M	18"	Arching stems; white flowers in early spring; tall groundcover for shade
Bloodroot	<i>Sanguinaria canadensis</i>	P,S	M	12"	Showy white flowers in early spring
New England aster	<i>Symphyotrichum (Aster) novae-angliae</i>	F,P	M,S,X	24"	Fall flowers are deep purple
New York aster	<i>Symphyotrichum (Aster) novi-belgii</i>	F,P	M,S,X	24"	Fall flowers are purple
Foam-flower	<i>Tiarella cordifolia</i>	P	M	6"	Delicate white flowers in early spring
Wild-oats	<i>Uvularia sessilifolia</i>	P,S	M	6"	Creamy, bell-shaped flowers in early spring
Violet	<i>Viola species</i>	P	M	2-6"	Various species and colors; most self-sow to form groundcovers

Perennials: Ferns

NAME					
Common	Scientific			Height	Comments
Maidenhair fern	<i>Adiantum pedatum</i>	P,S	M	18"	Graceful black stem; nearly circular fronds; tolerates alkaline soil

Lady fern	<i>Athyrium angustum</i>	P,S	H,M	18"	Lacy fronds; reddish in spring
Hay-scented fern	<i>Dennstaedtia punctilobula</i>	F,P	S,X	12"	Fragrant lacy fronds; tolerates hot, dry sites; spreading
Spinulose wood fern	<i>Dryopteris carthusiana</i>	P,S	M,S	24"	Lacy fronds; reddish in spring
Marginal wood fern	<i>Dryopteris marginalis</i>	F,P	S,X	24"	Easy to grow; fronds blue-green; tolerates rocky sites
Ostrich fern	<i>Matteuccia struthiopteris</i> var. <i>pennsylvanica</i>	P,S	M	36"	Edible fiddleheads; beautiful green fronds; plume-like fertile fronds
Sensitive fern	<i>Onoclea sensibilis</i>	F,P	H,M	12"	Easy to grow; spreads; persistent bead-like fertile fronds in winter
Cinnamon fern	<i>Osmundastrum cinnamomeum</i> (<i>Osmunda cinnamomea</i>)	P,S	H,M	36"	Easy to grow; attractive cinnamon-colored fertile fronds in spring
Interrupted fern	<i>Osmunda claytoniana</i>	F,P,S	H,M,S,X	36"	Easy to grow; spreads well; luxuriant spring growth

Royal fern	<i>Osmunda regalis var. spectabilis</i>	F,P,S	H,M,S	36"	Vase-shaped; interesting fertile fronds; sterile fronds finely dissected
Long beech fern	<i>Phegopteris connectilis</i>	P,S	M	6"	Small size fern, low growing; spreads well
Christmas fern	<i>Polystichum acrostichoides</i>	P,S	M	12"	Leathery, evergreen fronds

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