# PLANT FACT SHEETS

## for Rain Gardens / Bioretention Systems

Rutgers Cooperative Extension

Water Resources Program

115 plants | Catalog 8a5a6ec5e4c6ba6f

| | | | |
|---|---|---|---|
| [MBG] | Missouri Botanical Garden | [WF] | Lady Bird Johnson Wildflower Center |
| [PRN] | Pleasant Run Nursery | [NMN] | New Moon Nursery |
| [PNL] | Pinelands Nursery | | |

MBG / WF: botanical information · PRN / NMN / PNL: NJ nursery information

Full references and photo credits follow the plant sheets.

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# Herbaceous, Perennial

# *Amsonia hubrichtii*

**Threadleaf Blue Star / Arkansas Amsonia / Hubricht's Bluestar**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Eric Hunt · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Light blue | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 5a - 8b

**Attracts:** Butterflies, Pollinators | **Tolerates:** Deer, Clay Soil, Some Drought

**Native Habitats:** Fields, rocky outcrops, and freely draining stream banks and bottomlands in the Arkansas–Oklahoma Ouachita region and nearby Missouri.

**Soil Description:** Average, moderately moist, well-drained soil. Tolerates poorer soils, including clay.

## Recommended Uses:

Masses in borders, rock gardens, cottage gardens and open woodland plantings.

## Additional Benefits:

Fine foliage texture with yellow to orange autumn color.

## Culture:

Clump-forming perennial with fine, threadlike foliage. Establishment can be slow during the first one or two years.

## General Maintenance Level: Low

Shape after flowering if needed.

Wildflower suggests cutting stems to about 6 inches after bloom to encourage a rounded mound.

**Problems:** No serious insect or disease problems reported by NC State. Stems can flop in excessive shade or rich soil. Milky sap may irritate skin.

**Condition Comments:** Full sun gives the strongest autumn color. Afternoon shade may prolong flowering; excessive shade or rich soil can cause stems to flop.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Amsonia tabernaemontana*

**Eastern Bluestar / Blue Star / Blue Dogbane**





*Images: Susan Strine · CC BY 2.0 [license] (resized); Sten Porse · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Light blue | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Mar, Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Hummingbirds, Moths, Pollinators | **Tolerates:** Deer, Clay Soil, Some Drought Once Established

**Native Habitats:** Moist woodlands, stream banks, wet sandy openings, slopes and open fields.

**Soil Description:** Moist, loamy, well-drained soil is preferred; sand and clay soils are also tolerated.

## Recommended Uses:

Grouped native or pollinator plantings, borders, cottage gardens, rain gardens and woodland edges.

## Additional Benefits:

Fine-textured foliage, pale blue spring flowers and yellow autumn color; flowers can be used in arrangements.

## Culture:

Erect, clump-forming perennial with leafy stems and narrow leaves. Establishment is slow; seedlings may first flower in their second year.

## General Maintenance Level: Low

Prune after flowering only as needed for shape or flopping.

Deadhead if self-seeding is unwanted. Wear gloves when cutting; the milky sap can irritate sensitive skin.

**Problems:** Rust may occur. Plants can flop in excessive shade or rich soil; milky sap may irritate sensitive skin.

**Condition Comments:** Full sun keeps growth more compact. Excessive shade or rich soil can cause flopping; flowering dates vary by location.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN*]*

# *Amsonia tabernaemontana 'Montana'*

**Blue Star**



*Images: Mary Free / Master Gardeners of Northern Virginia [license] (resized)*

## Characteristics:

**Bloom Color:** Blue | **Height:** 1 - 1.5 ft | **Spread:** 0.75 - 1 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 4 - 9

**Attracts:** Bees | **Tolerates:** Deer, Clay Soil, Some Drought

**Native Habitats:** Unknown

**Soil Description:** Average, moist, well-drained soil; loam preferred. Some drought is tolerated.

## Recommended Uses:

Grouped borders, rock and cottage gardens, woodland edges and rain-garden plantings.

## Additional Benefits:

Compact foliage mound, blue spring flowers and potentially yellow autumn foliage.

## Culture:

Compact bluestar selection with slightly wider leaves and deeper blue flowers that open earlier than the typical species.

## General Maintenance Level: Low

Routine trimming is usually unnecessary for this compact cultivar.

Light shaping or support may still be useful in shade or overly rich soil.

**Problems:** Rust may occur. Rich soil or shade can cause flopping; MBG reports no serious insect or disease problems.

**Condition Comments:** Full sun usually keeps plants compact. Rich soil or shade can encourage a looser, floppy habit.

*Botanical references: [MBG]*

# *Amsonia tabernaemontana var. salicifolia*

**Willowleaf Bluestar**



*Images: Krzysztof Ziarnek, Kenraiz · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pale blue | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (Atlantic and Gulf Coastal Plain; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Butterflies, Bees, Moths, Pollinators | **Tolerates:** Deer, Clay Soil, Some Drought

**Native Habitats:** Thickets in its southeastern United States native range.

**Soil Description:** Average, moist, well-drained soil; loam preferred. Some clay and drier soils are tolerated in suitable light conditions.

## Recommended Uses:

Borders, rock and cottage gardens, rain gardens and woodland edges; effective in groups or masses.

## Additional Benefits:

Pale blue spring flowers, slender foliage and bright yellow autumn color, sometimes with red or orange tones.

## Culture:

Natural botanical variety with narrow, willow-like leaves and a vase-shaped clump. Pale blue flowers have white throats; stems are less erect than the typical species form.

## General Maintenance Level: Low

Shape after flowering if a rounded mound is desired.

Staking or light pruning may be needed in shade or rich soil; routine annual cutting is not mandatory.

**Problems:** Tall or shaded plants may flop and need support. MBG reports no serious insect or disease problems for this variety.

**Condition Comments:** Stems may lean or flop, especially in shade or rich soil. Full sun gives sturdier growth; support or post-flowering shaping may be useful. AGCP FACW follows the NWPL species-level rule for botanical varieties; no separate varietal rating is assigned.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN]*

# *Aquilegia canadensis*

**Eastern red columbine / Canadian columbine**





*Images: Patty Felder · CC BY 4.0 [license] (resized); Cathy Dewitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Red, Yellow, Pink | **Height:** 1 - 3 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Apr, May | **Sun:** Part Shade, Full Sun | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Hummingbirds, Bees, Butterflies, Birds, Moths, Pollinators | **Tolerates:** Deer, Rabbit, Some Drought, Dry Soil

**Native Habitats:** Rocky woods, woodland slopes, ledges and openings in eastern North America.

**Soil Description:** Well-drained sandy or loamy soil with moderate moisture. Avoid waterlogging and excessively rich soil.

## Recommended Uses:

Woodland and open-shade gardens, native borders, naturalized plantings and hummingbird or pollinator gardens.

## Additional Benefits:

Spring nectar supports hummingbirds and other pollinators; seeds feed songbirds and foliage can form a seasonal groundcover.

## Culture:

Clumping perennial with divided leaves and nodding, spurred flowers. It freely self-seeds; new seedlings commonly flower in their second year.

## General Maintenance Level: Medium

Remove spent flower stems if repeat bloom or tidiness is desired.

Keep suitable moisture after flowering to retain foliage; cut deteriorated foliage back. Leave some seedheads if natural reseeding is wanted.

**Problems:** Excess summer water can cause crown rot; overly rich soil can produce weak stems and shorter-lived plants. This species is comparatively resistant to columbine leaf miners.

**Condition Comments:** Partial shade is preferred. More sun needs reliable moisture; hot, continuous sun may scorch foliage. Flowering season varies by region.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Arisaema triphyllum*

**Jack-in-the-pulpit**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Cathy DeWitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green, Purple, Brown | **Height:** 1 - 2.5 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Apr, May | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Birds, Turtles, Flies, Gnats | **Tolerates:** Heavy Shade, Wet Soil, Deer, Black Walnut

**Native Habitats:** Moist eastern North American woods, shaded stream margins and seasonally wet woodland sites.

**Soil Description:** Consistently moist, humus-rich, fertile woodland soil; avoid heavy clay.

## Recommended Uses:

Undisturbed shady woodland, wild and native plant gardens with suitable moisture.

## Additional Benefits:

Distinctive spring hoods and foliage are followed by red fruit clusters that feed wildlife.

## Culture:

Corm-forming woodland perennial with usually three-part leaves and a hooded spathe surrounding the flowering spadix. Small offsets can form a colony.

## General Maintenance Level: Medium

Keep woodland soil moist and leave protective leaf litter through winter.

Leave established plants undisturbed. Seed-grown plants may take several years to flower.

**Problems:** Reviewed sources report no significant insect or disease issues. Heavy clay is unsuitable; ingestion is toxic and root contact may irritate skin.

**Condition Comments:** All parts are toxic if eaten; calcium oxalate can cause painful mouth and throat irritation. Root contact may irritate skin. Plants often become dormant by midsummer.

*Botanical references: [MBG] [WF]*

# *Asclepias incarnata*

**Swamp milkweed**





*Images: Joshua Mayer · CC BY-SA 2.0 [license] (resized); Frank Mayfield · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Mauve, White | **Height:** 3 - 5 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Moths, Hummingbirds, Pollinators | **Tolerates:** Deer, Clay Soil, Wet Soil

**Native Habitats:** Swamps, wet meadows, river bottomlands, pond margins and other wet sites in central and eastern North America.

**Soil Description:** Moist clay or loam with neutral to acidic pH; also grows in average, well-drained garden soil with adequate moisture.

## Recommended Uses:

Sunny moist borders, pond or stream margins, rain gardens and native butterfly or pollinator plantings.

## Additional Benefits:

Nectar feeds pollinators and foliage supports Monarch caterpillars. Silky-haired seeds follow in elongated pods.

## Culture:

Upright clumping perennial with narrow leaves, a deep taproot and fragrant flower clusters, usually pink to mauve and occasionally white.

## General Maintenance Level: Low

Leave established roots undisturbed and monitor aphids or seed-pod damage.

Protect Monarch caterpillars and beneficial insects when considering pest management; routine spraying is not prescribed.

**Problems:** Aphids may occur, and milkweed bugs can damage seed pods. Caterpillar feeding is expected on a host plant; pest treatments can harm Monarchs and beneficial insects.

**Condition Comments:** Deep roots are best left undisturbed; shoots emerge late in spring. Plant tissues are toxic if eaten, and milky sap can irritate skin and eyes. Flowering dates vary by region.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Asclepias incarnata 'Ice Ballet'*

**Ice Ballet Swamp Milkweed**





*Images: Salicyna · CC BY-SA 4.0 [license] (resized); Salicyna · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 4 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun | **Water:** Medium, Wet | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Butterflies, Bees, Moths, Hummingbirds, Pollinators | **Tolerates:** Deer, Clay Soil, Wet Soil

**Native Habitats:** Not applicable

**Soil Description:** Medium to wet soil in sun; also tolerates average, well-drained garden soil with adequate moisture.

## Recommended Uses:

Sunny borders, rain gardens, moist meadows, pond or stream margins, and butterfly or pollinator gardens.

## Additional Benefits:

Fragrant summer flowers provide nectar; Monarch caterpillars feed on the foliage. Silky-haired seeds follow in elongated pods.

## Culture:

Compact, white-flowered nursery selection of swamp milkweed with upright clumps, narrow dark green leaves and deep roots.

## General Maintenance Level: Low

Leave established roots undisturbed and monitor aphids.

Protect Monarch caterpillars and beneficial insects when considering pest management; aphid presence alone does not establish serious damage.

**Problems:** Oleander aphids and associated sooty mold may occur. Heavy-looking aphid colonies often cause limited plant damage; avoid harming caterpillars or beneficial insects.

**Condition Comments:** Deep taproots are best left undisturbed once established. Shoots emerge slowly in spring; do not mistake late emergence for plant loss.

*Botanical references: [MBG]*
*NJ nursery information: [PRN] [NMN]*

# *Asclepias syriaca*

**Common milkweed**





*Images: Cathy DeWitt · CC BY 4.0 [license] (resized); Joshua Mayer · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Mauve, White | **Height:** 3 - 5 ft | **Spread:** 0.75 - 1 ft | **Bloom Time:** Jun, Jul, Aug | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Moths, Pollinators | **Tolerates:** Deer, Drought, Dry Soil, Shallow Rocky Soil, Erosion

**Native Habitats:** Fields, open woods, meadows, roadsides and other open disturbed sites.

**Soil Description:** Average, well-drained sand, loam, clay or rocky soil; tolerates poor and dryish conditions.

## Recommended Uses:

Meadows, prairies, naturalized native areas and spacious butterfly or pollinator gardens.

## Additional Benefits:

Flowers provide nectar, foliage hosts Monarch caterpillars and milkweed tussock moths, and seedpods add seasonal interest.

## Culture:

Upright perennial with broad opposite leaves, fragrant domed flower clusters and warty pods that release silky-haired seeds. Rhizomes can form large colonies.

## General Maintenance Level: Low

Monitor spreading rhizomes and seedlings in confined gardens.

Remove seed pods before they open if reseeding is unwanted; consider the habitat value when managing host plants.

**Problems:** Rhizomes and seedlings can spread aggressively. Aphids are common; control attempts may harm Monarch caterpillars and beneficial insects. Sap can irritate skin and eyes.

**Condition Comments:** Needs sun and room for expanding colonies. The listed width describes a shoot, not the eventual patch. Plant tissues are toxic if eaten; sap may irritate skin and eyes.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Asclepias tuberosa*

**Butterfly weed / Butterfly milkweed**





*Images: Cathy DeWitt · CC BY 4.0 [license] (resized); Cathy DeWitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Orange, Yellow-orange | **Height:** 1 - 2.5 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Jun, Jul, Aug | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Moths, Hummingbirds, Pollinators | **Tolerates:** Deer, Drought, Dry Soil, Shallow Rocky Soil, Erosion, Moderate Salt

**Native Habitats:** Dry rocky woods, glades, prairies, fields, roadsides and open slopes.

**Soil Description:** Average to poor, dry or moderately moist soil with excellent drainage; sandy or rocky soils are suitable.

## Recommended Uses:

Sunny native borders, butterfly gardens, rock gardens, meadows, prairies and well-drained slopes.

## Additional Benefits:

Flowers provide nectar and foliage hosts Monarch and milkweed tussock moth caterpillars. Silky-haired seeds follow in spindle-shaped pods.

## Culture:

Clumping perennial with narrow leaves, deep tuberous roots, clear sap and bright flat-topped flower clusters. New shoots emerge late in spring.

## General Maintenance Level: Low

Provide good drainage and leave the taproot undisturbed.

Remove pods before opening if reseeding is unwanted; protect caterpillars when considering pest management.

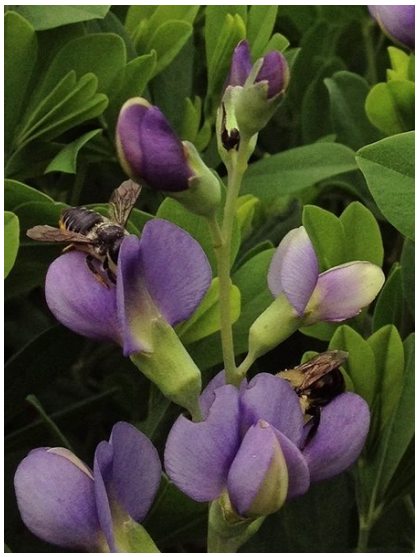
**Problems:** Wet, poorly drained soil can cause crown rot; rust, leaf spot and aphids may occur. Insect-control attempts can harm Monarch caterpillars or beneficial insects.

**Condition Comments:** Deep roots transplant poorly; leave established plants undisturbed. Seedlings may take two or three years to flower. Clear sap can irritate skin and eyes; plant tissues are toxic if eaten.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Baptisia australis*

**Blue false indigo / Blue wild indigo**





*Images: Fritz Flohr Reynolds · CC BY-SA 2.0 [license] (resized); R. A. Nonenmacher · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Indigo blue, Purple | **Height:** 3 - 4 ft | **Spread:** 3 - 4 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Pollinators | **Tolerates:** Drought, Poor Soil, Clay Soil, Dry Soil, Shallow Rocky Soil, Erosion, Rabbit

**Native Habitats:** Rich woods, woodland borders, thickets, stream margins, glades and prairies in central and eastern North America.

**Soil Description:** Average, well-drained soil, including clay; tolerates poorer and drier soils once established.

## Recommended Uses:

Native borders, cottage gardens, meadows and prairie plantings as a specimen or in small groups.

## Additional Benefits:

Flowers feed pollinators; attractive foliage and dark inflated seedpods extend seasonal interest.

## Culture:

Slowly expanding, deep-rooted clump with trifoliate blue-green leaves, upright pea-like flower racemes and inflated pods that darken when ripe.

## General Maintenance Level: Low

Leave established roots undisturbed.

Optional trimming after flowering can improve shape but removes developing ornamental seedpods; support may be needed in shade.

**Problems:** Sources report no major pest or disease problems. Shade-grown stems may need support; MBG flags poor performance near black walnut.

**Condition Comments:** Deep roots make established clumps difficult to transplant. Young plants take several years to establish. Shade can cause flopping; all plant parts are toxic if eaten.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Caltha palustris*

**Marsh marigold**





*Images: BerndH · CC BY-SA 3.0 [license] (resized); H. Zell · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 1 - 1.5 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Apr, May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 7b

**Attracts:** Bees, Hummingbirds | **Tolerates:** Wet Soil, Deer

**Native Habitats:** Marshes, swamps, wet meadows, moist woods and stream margins.

**Soil Description:** Wet, humus-rich, muddy or boggy soil; suitable shallow-water margins need continuous moisture.

## Recommended Uses:

Bog or water gardens, suitable wet rain gardens and shallow pond edges.

## Additional Benefits:

Early spring color and glossy rounded foliage add interest at wet garden margins; flowers provide insect forage.

## Culture:

Rhizomatous buttercup-family perennial with rounded to heart-shaped leaves and shiny yellow petal-like sepals on branching stems.

## General Maintenance Level: Low

Keep the site consistently wet or moist.

Allow room for gradual spread by rhizomes or seed; protect plants from drying winds.

**Problems:** Powdery mildew and rust can occur. Dry soil and summer heat can reduce growth or trigger dormancy. Do not confuse this species with invasive lesser celandine.

**Condition Comments:** Prevent drying. Plants may go dormant in hot summers, especially in full sun; afternoon shade can help. Plant tissues are toxic if eaten and are not classroom food.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Chelone glabra*

**White turtlehead**





*Images: R.A Nonenmacher · CC BY-SA 4.0 [license] (resized); R.A Nonenmacher · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pink tinge | **Height:** 2 - 3 ft | **Spread:** 1.5 - 2.5 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Butterflies, Hummingbirds, Bees | **Tolerates:** Wet Soil, Erosion

**Native Habitats:** Moist woods, stream banks, fens, floodplains, marshes and swampy ground in eastern and central North America.

**Soil Description:** Rich, humus-bearing, moist to wet soil. Composted leaf mulch helps retain moisture, especially in sunny locations.

## Recommended Uses:

Moist borders, native and woodland gardens, rain gardens and pond or stream margins.

## Additional Benefits:

Late-season flowers provide nectar, and foliage is a larval host for the Baltimore Checkerspot butterfly.

## Culture:

Clump-forming perennial with stiff leafy stems, opposite toothed leaves and hooded, two-lipped flowers that resemble a turtle head. Slowly spreads by rhizomes.

## General Maintenance Level: Low

Maintain moisture and mulch as needed.

Pinch stem tips in spring if a shorter, bushier plant is desired; stake only where growth needs support.

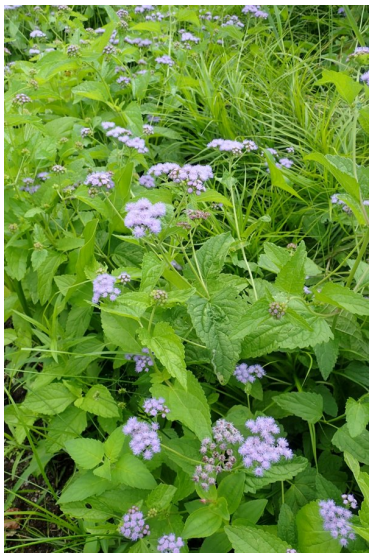
**Problems:** Mildew can occur when soil is too dry or air circulation is poor. Strong shade can lead to flopping; otherwise reviewed sources report no serious pest or disease problems.

**Condition Comments:** Avoid drying soil. Too much shade may cause stems to lean; spring pinching can encourage bushier growth and reduce the need for support.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Conoclinium coelestinum*

**Blue Mistflower / Wild Ageratum / Blue Boneset**





*Images: Krzysztof Ziarnek · CC BY-SA 4.0 [license] (resized); Bob Peterson · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Blue, Lavender, Pink | **Height:** 1 - 3 ft | **Spread:** 1.5 - 3 ft | **Bloom Time:** Jul, Aug, Sep, Oct, Nov | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 10b

**Attracts:** Butterflies, Bees, Pollinators, Songbirds | **Tolerates:** Deer, Wet Soil, Clay Soil

**Native Habitats:** Woodland margins, stream banks, low woods, wet meadows and ditches.

**Soil Description:** Moist soil rich in organic matter; loam, sand or clay. Avoid allowing the soil to dry out.

## Recommended Uses:

Naturalized moist meadows, pond margins, and native or pollinator gardens. Allow room for spreading roots; avoid small, tightly managed beds.

## Additional Benefits:

Late-season nectar and pollen for butterflies and native bees; seed and habitat value for birds.

## Culture:

Vigorous perennial that forms colonies through rhizomes and self-seeding. Propagate by dividing clumps in early spring.

## General Maintenance Level: High

Control spreading growth in confined spaces.

Thin and divide colonies regularly where necessary. Divide clumps in early spring; taller stems may be cut back in spring to reduce flopping.

**Problems:** Aphids, leaf miners and powdery mildew may occur. Tall stems can flop, and spreading growth can crowd neighboring plants.

**Condition Comments:** Usually 1–3 feet tall, occasionally reaching 6 feet in Wildflower records. Bloom timing varies with location and can continue until frost. Spreads quickly and needs room.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Coreopsis lanceolata*

**Lanceleaf tickseed / Lanceleaf coreopsis**




*Images: Susan Strine · CC BY 2.0 [license] (resized); Susan Strine · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 1 - 2 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Butterflies, Bees, Birds | **Tolerates:** Deer, Drought, Dry Soil, Shallow Rocky Soil, Heat, Humidity

**Native Habitats:** North American prairies, glades, open woodland, fields, roadsides and dry open places. Native versus naturalized status varies by region.

**Soil Description:** Well-drained sandy, gravelly or rocky soil; moderate to poor fertility is suitable.

## Recommended Uses:

Sunny meadows, naturalized wildflower plantings, rock gardens, dry borders and cut-flower plantings where spread can be managed.

## Additional Benefits:

Yellow flower heads provide a long ornamental display and food for pollinating insects; seeds feed birds.

## Culture:

Clump-forming perennial with narrow leaves concentrated near the base. Slender stems carry yellow daisy-like heads with notched ray tips; abundant seed can form colonies.

## General Maintenance Level: Medium

Deadhead and manage seedlings where a tidy planting is wanted.

Cut back sprawling growth as needed; division every few years may maintain vigor in borders.

**Problems:** Aggressive self-seeding and sprawling can occur. Crown rot is possible in wet, poorly drained soils; reviewed sources otherwise report few serious pests or diseases.

**Condition Comments:** Often short-lived but readily self-sows. Rich, moist soils can cause sprawling; remove spent heads if additional bloom and fewer seedlings are desired.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Echinacea purpurea*

**Purple coneflower / Eastern purple coneflower**





*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Cathy Dewitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purplish pink | **Height:** 2 - 5 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** Jun, Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Birds, Butterflies, Bees, Moths | **Tolerates:** Deer, Drought Once Established, Heavy Clay, Dry Soil, Shallow Rocky Soil, Heat, Humidity

**Native Habitats:** Moist to mesic prairies, meadows, savannas, open woodland edges and clearings, limestone glades and roadsides in the central and eastern United States.

**Soil Description:** Well-drained soil, including sandy, rocky or clay soils; moist loam is preferred but established plants tolerate poorer, drier ground.

## Recommended Uses:

Sunny perennial borders, meadows, naturalized groups, pollinator plantings and cut flowers; light woodland edges with enough sun can also suit it.

## Additional Benefits:

Long-lasting flowers supply pollen and nectar, seeds feed songbirds, and retained stems can provide nesting habitat for native bees.

## Culture:

Upright perennial with coarse, rough leaves and sturdy stems. Drooping purplish-pink ray flowers surround a raised, spiny cone; short rhizomes and seed can expand clumps.

## General Maintenance Level: Low

Divide crowded clumps and manage seedlings if needed.

Leave some seedheads and standing stems for wildlife where appropriate; remove spent flowers if a tidier appearance is preferred.

**Problems:** Japanese beetles and leaf spots can occur, and plants are susceptible to aster yellows. Good drainage and suitable siting remain important.

**Condition Comments:** Leave some seedheads for birds if self-seeding is acceptable. Divide crowded clumps when needed; deadheading is optional rather than required for all rebloom.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Eupatorium perfoliatum*

**Common boneset / American boneset**




*Images: H. Zell · CC BY-SA 3.0 [license] (resized); H. Zell · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 4 - 6 ft | **Spread:** 3 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Butterflies, Bees, Moths, Birds | **Tolerates:** Deer, Rabbits, Heavy Clay, Wet Soil, Brief Flooding

**Native Habitats:** Wet meadows and prairies, alluvial or bottomland woods, marshes, bogs, fens, seeps, riverbanks and wet ditches in eastern North America.

**Soil Description:** Moist to wet soil with organic matter; sandy, clay and organic soils are suitable if moisture is maintained.

## Recommended Uses:

Moist perennial borders, rain gardens, pond and stream margins, native meadows and pollinator plantings.

## Additional Benefits:

Late flowers supply pollen and nectar to many insects; foliage supports moth larvae and seeds can feed birds.

## Culture:

Hairy-stemmed, clump-forming perennial with opposite wrinkled leaves joined around the stem. Flat-topped clusters of small white disc flowers are followed by tufted seeds.

## General Maintenance Level: Low

Maintain moisture and support floppy stems if needed.

Early-spring cutback can encourage bushier growth; allow room for rhizomatous clumps.

**Problems:** Foliage may scorch if soil dries, and rich growth can flop. Plant parts are toxic if ingested and may cause contact dermatitis; avoid ingestion and sensitive skin contact.

**Condition Comments:** Rich fertile sites can produce tall, floppy growth that needs support. Do not allow soil to dry out; plants may spread into colonies.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Eurybia divaricata*

**White wood aster**




*Images: Fritzflohrreynolds · CC BY-SA 3.0 [license] (resized); Fritzflohrreynolds · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 1 - 2.5 ft | **Spread:** 1.5 - 2.5 ft | **Bloom Time:** Aug, Sep | **Sun:** Part Shade, Full Shade | **Water:** Dry, Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Bees, Butterflies, Birds, Small Mammals | **Tolerates:** Drought, Dry Shade, Heavy Shade, Poor Soil, Shallow Rocky Soil

**Native Habitats:** Dry, open eastern North American woods, woodland slopes and Appalachian forest openings.

**Soil Description:** Average, well-drained woodland soil, including dry rocky sites; avoid poorly drained heavy clay.

## Recommended Uses:

Open shade and woodland gardens, dry-shade groups, native borders and pollinator plantings where spread is acceptable.

## Additional Benefits:

Late-season flowers supply nectar and pollen in shade; seeds feed birds and mammals, and foliage hosts Pearl Crescent larvae.

## Culture:

Rhizomatous perennial with dark, sometimes zigzag stems and coarsely toothed, heart-shaped lower leaves. Small white-rayed heads occur in flat-topped clusters; disc centers change from yellow to red.

## General Maintenance Level: Low

Manage spreading clumps where needed.

Optional early-summer shearing can keep growth compact; divide in spring when renewal or spacing is needed.

**Problems:** Powdery mildew can occur, and aster wilt is possible in poorly drained clay. Provide drainage and air circulation; vigorous spread may need management.

**Condition Comments:** Rhizomes can spread vigorously even in dry shade. Provide air circulation and room for colonies or manage spread in small gardens.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN] [NMN] [PNL] [PRN*]*

# *Eutrochium dubium*

**Coastal plain Joe-Pye weed / Three-nerved Joe-Pye weed**





*Images: Kristine Paulus · CC BY 4.0 [license] (resized); Joshua Mayer · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Purple | **Height:** 3 - 5 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Bees, Birds | **Tolerates:** Deer, Heavy Clay, Wet Soil

**Native Habitats:** Sandy coastal-plain swamps, marshes, bogs, riverbanks, wet meadows, shores, damp thickets and swales in eastern North America.

**Soil Description:** Moist, fertile, humus-rich soil; moist sandy, gravelly or clay soils can also suit it.

## Recommended Uses:

Moist meadows, rain gardens, native perennial borders, pond margins and butterfly or wildlife plantings.

## Additional Benefits:

Summer-to-autumn flowers feed pollinators; tufted seeds feed songbirds and provide nesting material.

## Culture:

Upright perennial with sturdy, often purple-speckled stems and toothed leaves in whorls of three or four. Prominent lateral veins flank the midrib; domed clusters contain small pink-purple disc flowers.

## General Maintenance Level: Low

Maintain moisture and manage seedlings if needed.

Cut old stems back in late winter when desired; leave seed clusters where bird food and nesting material are priorities.

**Problems:** Leaves can scorch if soil dries out. Reviewed species sources report few serious pests or diseases, and NC State notes powdery-mildew resistance.

**Condition Comments:** Keep soil moist to avoid scorched leaves. Allow room for seedlings; this species is generally shorter than some other Joe-Pye weeds but is not the cultivar Little Joe.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PNL] [PRN*]*

# *Eutrochium maculatum*

**Spotted Joe-Pye weed**





*Images: Kathleen Moore · CC BY 4.0 [license] (resized); Kathleen Moore · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purple-pink | **Height:** 4 - 7 ft | **Spread:** 3 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 8

**Attracts:** Butterflies, Bees | **Tolerates:** Deer, Heavy Clay, Wet Soil

**Native Habitats:** Damp meadows, wet thickets, calcareous meadows and marl fens, cove forests and grassy openings in eastern North America.

**Soil Description:** Moist, fertile, humus-rich soil, including mineral-rich silty or sandy loams; can tolerate waterlogged soils.

## Recommended Uses:

Backs of moist borders, meadows, rain gardens, pond margins and native or pollinator groups.

## Additional Benefits:

Large summer flower clusters provide nectar and pollen, while tall stems and seedheads add late-season structure.

## Culture:

Tall perennial with branched, often purple-speckled stems and toothed leaves in whorls. Flat-topped flower arrays contain numerous small pink-purple disc florets; rhizomes may form colonies.

## General Maintenance Level: Low

Maintain moisture and allow room for clumps.

Old stems may be cut back in late winter; divide established clumps in spring or fall when needed.

**Problems:** Reviewed sources report few serious insect or disease problems. Leaves may scorch in heat if soil becomes dry.

**Condition Comments:** Do not let the root zone dry out. Rhizomes can produce small colonies; provide room for mature height and width.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PNL] [PRN*]*

# *Eutrochium purpureum*

**Sweet-scented Joe-Pye weed / Purple Joe-Pye weed**





*Images: Jeff Clark · CC BY 4.0 [license] (resized); Eric Schmidt · CC0 1.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Mauve pink | **Height:** 5 - 7 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Butterflies, Bees, Moths, Birds | **Tolerates:** Deer, Heavy Clay, Occasional Wet Soil

**Native Habitats:** Moist prairies, thickets, low ground, woodland margins, wooded slopes, shaded riverbanks and stream margins in eastern and central North America. In New Jersey, it is reported growing naturally with sensitive fern (Onoclea sensibilis).

**Soil Description:** Moist, fertile, humus-rich soil with drainage; clay, loam and sandy soils can be suitable.

## Recommended Uses:

Backs of moist borders, open woodland plantings, meadows, native groups and butterfly or pollinator gardens.

## Additional Benefits:

Fragrant flower clusters provide nectar and pollen, while seedheads feed birds and tall growth adds architectural interest.

## Culture:

Tall, clump-forming perennial with sturdy green stems and purplish nodes. Toothed leaves occur in whorls, and large domed clusters of small vanilla-scented pink-purple flowers develop in summer.

## General Maintenance Level: Low

Maintain moisture and manage mature clumps as needed.

Old stems may be cut back in late winter; divide established clumps when required for space or renewal.

**Problems:** Powdery mildew and rust can occur. Leaves may scorch if soils dry out; provide suitable moisture and space.

**Condition Comments:** Allow space for its tall stems and broad flower clusters. Maintain soil moisture; open woodland or partly shaded borders can suit this species.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Helenium autumnale*

**Common sneezeweed / Autumn sneezeweed**




*Images: Virginia State Parks · CC BY 2.0 [license] (resized); Virginia State Parks · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 3 - 5 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Butterflies, Bees | **Tolerates:** Deer, Rabbits, Heavy Clay, Wet Soil

**Native Habitats:** Moist prairies and meadows, stream and pond margins, swamps, ditches and wet open ground across much of North America.

**Soil Description:** Rich, moist to wet soil; heavy clay can be suitable if moisture remains available.

## Recommended Uses:

Moist borders, native and pollinator meadows, naturalized groups and pond or stream margins.

## Additional Benefits:

Late-season yellow flowers provide nectar and pollen and add height and color to moist plantings.

## Culture:

Clump-forming perennial with upright, winged stems and toothed, lance-shaped leaves. Yellow rays with notched tips surround rounded central discs in late summer and fall.

## General Maintenance Level: Medium

Provide support or pinch tall growth where needed.

Remove spent flowers if extended bloom is desired; divide crowded clumps every few years to maintain vigor.

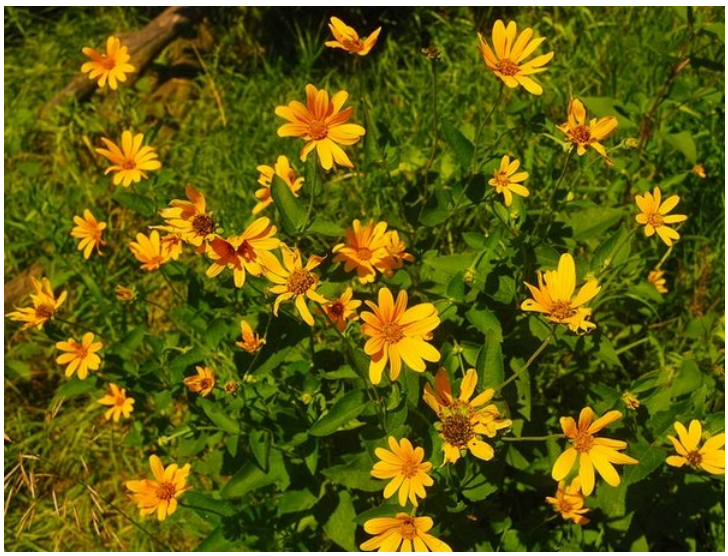
**Problems:** Powdery mildew, leaf spots and rust can occur, and tall stems may need support. Plant parts are toxic if eaten in quantity and may cause contact dermatitis; avoid ingestion and sensitive skin contact.

**Condition Comments:** Maintain moisture and avoid overfertilizing. Tall stems may need support; optional early-summer pinching encourages bushier growth.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PNL] [PRN*]*

# *Heliopsis helianthoides*

**Smooth oxeye / Oxeye sunflower / False sunflower**





*Images: Joshua Mayer · CC BY-SA 2.0 [license] (resized); Fritz Flohr Reynolds · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Orange-yellow | **Height:** 3 - 6 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jun, Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Bees, Butterflies, Birds, Hummingbirds | **Tolerates:** Drought, Dry Soil, Heavy Clay, Poor Soil, Shallow Rocky Soil, Erosion, Heat

**Native Habitats:** Open woods, prairies, thickets, grassy meadows, stream banks, roadsides and fields in eastern and central North America.

**Soil Description:** Well-drained soil of average fertility; adaptable to dry, poor, rocky and clay soils.

## Recommended Uses:

Perennial and cutting borders, native meadows, naturalized groups and sunny pollinator plantings.

## Additional Benefits:

Long summer flower display provides pollen and nectar; seeds can feed songbirds and flowers suit cutting.

## Culture:

Upright, clump-forming, relatively short-lived perennial with opposite toothed leaves. Yellow-orange daisy-like heads have raised central discs; fertile ray flowers remain as the heads age.

## General Maintenance Level: Low

Deadhead or manage seedlings where needed.

Optional late-spring shortening can reduce height; support tall stems if their position requires it.

**Problems:** Aphids may occur. Taller growth, particularly in shade, may need staking; self-sown seedlings can form colonies.

**Condition Comments:** Light shade can reduce vigor and lead to weak stems. Tall plants may need support; deadheading can extend flowering and reduce unwanted seedlings.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Iris versicolor*

**Northern blue flag / Harlequin blueflag**





*Images: Danielle Langlois · CC BY-SA 3.0 [license] (resized); Fungus Guy · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Violet blue | **Height:** 2 - 2.5 ft | **Spread:** 2 - 2.5 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Butterflies, Birds, Hummingbirds | **Tolerates:** Wet Soil, Shallow Standing Water, Deer

**Native Habitats:** Marshes, swamps, wet meadows, sedge meadows, pond and stream shores and wetland forest margins in northeastern North America.

**Soil Description:** Rich, moist to wet, humus-bearing soil; suitable wet clay and shoreline soils are described.

## Recommended Uses:

Pond and water-garden margins, wet meadows, shallow-water containers and consistently moist borders.

## Additional Benefits:

Spring flowers provide color at wetland edges and food for visiting insects; foliage adds strong vertical texture.

## Culture:

Rhizomatous perennial with sword-shaped leaves in overlapping fans. Blue-violet flowers have three spreading falls with pale/yellow markings and three smaller upright standards; capsules follow bloom.

## General Maintenance Level: Low

Divide after flowering if clumps need managing.

Wear gloves when handling rhizomes; old leaves may be trimmed after frost.

**Problems:** Iris borers, thrips, aphids, several rots, leaf/blossom blights and mosaic virus can occur. Rhizomes and sap may irritate skin, and ingestion can cause illness; avoid ingestion and use gloves when dividing.

**Condition Comments:** Maintain constant moisture; shallow standing freshwater can be suitable. Rhizomes and seedlings can form colonies, so allow room for growth.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Liatris spicata*

**Dense blazing star / Marsh blazing star**





*Images: Kathleen Moore · CC BY 4.0 [license] (resized); Kathleen Moore · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purple | **Height:** 2 - 4 ft | **Spread:** 0.75 - 1.5 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Birds, Butterflies, Bees, Moths, Hummingbirds | **Tolerates:** Heavy Clay, Some Drought, Heat, Humidity, Poor Soil

**Native Habitats:** Moist low grounds, prairies, meadows, marsh and bog edges, calcareous seeps and moist sandflats in eastern North America.

**Soil Description:** Moist, fertile, well-drained soil, including suitable sandy loam and heavier loams or clay. Avoid persistently wet winter soil.

## Recommended Uses:

Sunny perennial borders, meadows, native and pollinator groups, cut flowers and suitably drained rain-garden margins.

## Additional Benefits:

Vertical flower spikes supply nectar and pollen, seeds feed birds, larvae use flowers or stems and retained dead stems can house native bees.

## Culture:

Upright corm-forming perennial with narrow leaves that become smaller up the stalk. Dense purple flower heads contain only disc florets and open from the top of each spike downward.

## General Maintenance Level: Low

Stake taller stems only where support is needed.

Allow seed and some standing stems for wildlife where practical; divide established clumps if required.

**Problems:** Tall stems may flop and need support. Browsing animals and corm-eating voles can damage plants; avoid wet winter soil and prolonged summer drying.

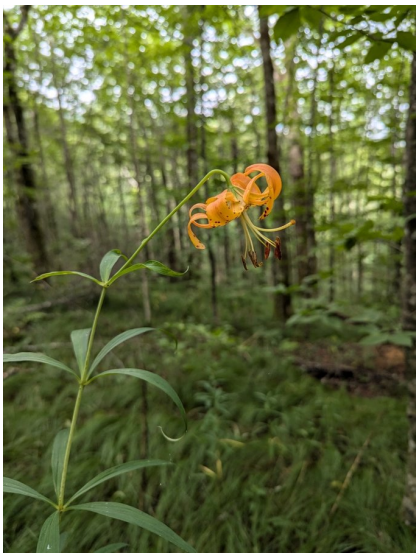
**Condition Comments:** Taller stems can need support. Preserve drainage in winter and maintain suitable summer moisture; corms and stems may be eaten by rodents and browsing animals.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Lilium superbum*

**Turk’s-cap lily**





*Images: Stacy Hodes · CC BY 4.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Orange | **Height:** 4 - 7 ft | **Spread:** 0.5 - 0.75 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 8b

**Attracts:** Hummingbirds, Butterflies | **Tolerates:** Wet Soil

**Native Habitats:** Moist woods, cove forests, ravines, wet meadows, swamps and coastal bog margins in eastern North America.

**Soil Description:** Consistently moist, humus-rich, well-drained soil; mulch can help keep the bulb/root zone cool and moist.

## Recommended Uses:

Moist native borders, woodland-edge groups, meadow plantings and pond peripheries with suitable drainage.

## Additional Benefits:

Tall summer flower stems add height and color; flowers attract hummingbirds and butterflies.

## Culture:

Tall bulbous perennial with leaves in whorls along upright stems. Nodding, dark-spotted orange flowers have six strongly recurved tepals and long projecting stamens.

## General Maintenance Level: Medium

Maintain moisture and protect bulbs from disturbance.

Use suitable mulch to keep the root zone cool; allow space for bulbs to develop colonies.

**Problems:** Aphids, bulb mites, slugs and snails may occur. Deer browse foliage and voles eat bulbs; unsuitable dry or poorly drained sites reduce performance.

**Condition Comments:** Do not let soil dry out. Bulbs can spread into colonies in favorable conditions but may establish or spread slowly in gardens.

*Botanical references: [MBG]  [WF]*

# *Lobelia cardinalis*

**Cardinal flower**





*Images: Cathy DeWitt · CC BY 4.0 [license] (resized); Marcia Boyle · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Scarlet red | **Height:** 2 - 4 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Hummingbirds, Butterflies | **Tolerates:** Wet Soil, Brief Flooding, Deer, Rabbits

**Native Habitats:** Wet meadows and prairies, bottomland openings, seeps, stream and pond edges, sloughs, marsh margins and low woods in North America.

**Soil Description:** Rich, humus-bearing, consistently moist to wet soil; suitable sandy loam, gravelly or clay soils can work if moisture is maintained.

## Recommended Uses:

Moist woodland borders, rain and water gardens, wet meadows, stream margins and hummingbird plantings.

## Additional Benefits:

Late red flowers supply nectar for hummingbirds and butterflies and add vertical color to moist gardens.

## Culture:

Clumping perennial with toothed lance-shaped leaves and basal winter rosettes. Upright spikes carry red tubular, two-lipped flowers that open from the bottom upward; small capsules follow.

## General Maintenance Level: Low

Maintain constant moisture and allow renewal from offsets or seed.

Separate established rosettes in spring if needed; use mulch carefully so small crowns remain uncovered.

**Problems:** Slugs and snails can damage foliage. Dry soil reduces survival, and thick mulch can smother small offsets. Plant parts contain toxic alkaloids and can cause serious illness if ingested; avoid ingestion.

**Condition Comments:** Often short-lived but can renew through offsets and seed in suitable moist sites. Protect the crown and winter rosettes without burying small offsets under thick mulch.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Lobelia siphilitica*

**Great blue lobelia / Blue cardinal flower**





*Images: H. Zell · CC BY-SA 3.0 [license] (resized); Joshua Mayer · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Blue | **Height:** 2 - 3 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Wet Soil, Shade

**Native Habitats:** Moist meadows, stream margins, springs, sloughs, swamps and low wooded areas in eastern North America.

**Soil Description:** Rich, humus-rich soil that stays moist to wet; fertile loam is suitable.

## Recommended Uses:

Moist perennial borders, woodland edges, rain gardens, native plantings and margins of ponds or streams.

## Additional Benefits:

Late-summer blue flowers extend garden interest and provide nectar and pollen for visiting insects.

## Culture:

Clumping perennial with upright leafy stems, finely toothed lance-shaped leaves and dense terminal clusters of two-lipped blue flowers. The lower lip has three conspicuous lobes.

## General Maintenance Level: Low

Divide clumps in spring as needed.

Monitor seedlings where self-sowing would be unwanted, and maintain soil moisture.

**Problems:** Slugs and snails may damage foliage. Avoid ingestion: plant parts contain toxic alkaloids. Dry soil can reduce performance.

**Condition Comments:** Maintain constant moisture. Provide afternoon shade in hot climates; full sun is suitable in cooler climates if soil stays moist.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Maianthemum racemosum*

**False Solomon's Seal / Solomon's Plume**





*Images: Kathy Sill · CC BY 4.0 [license] (resized); Dominicus Johannes Bergsma · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 2 - 3 ft | **Spread:** 1.5 - 3 ft | **Bloom Time:** Apr, May, Jun | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 2a - 8b

**Attracts:** Bees, Moths, Pollinators, Small Mammals, Songbirds | **Tolerates:** Sandy Soil, Rocky Soil

**Native Habitats:** Deciduous forests and shaded woodland sites.

**Soil Description:** Evenly moist, well-drained soil rich in organic matter; sandy or rocky soils are tolerated.

## Recommended Uses:

Woodland gardens, shaded native plantings, naturalized areas and shady borders.

## Additional Benefits:

Fragrant spring flower plumes, red berries for wildlife, and yellow autumn foliage.

## Culture:

Herbaceous perennial that dies back each autumn and emerges from rhizomes in spring. Thick rhizomes gradually form colonies.

## General Maintenance Level: Medium

Maintain even moisture and minimize root disturbance.

**Problems:** NC State reports no known insect pests or diseases. Roots dislike disturbance, particularly before establishment; hot, humid summers can reduce performance.

**Condition Comments:** Best in woodland shade. April–June flowering is reported for North Carolina and varies with location. Performance can decline in hot, humid southern summers.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN]*

# *Mimulus ringens*

**Allegheny monkey flower / Square-stemmed monkey flower**





*Images: Judy Gallagher · CC BY 2.0 [license] (resized); Joshua Mayer · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Lilac-purple | **Height:** 1 - 3 ft | **Spread:** 0.75 - 1 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Bees, Butterflies | **Tolerates:** Deer, Wet Soil

**Native Habitats:** Swamps, wet meadows, low woods and pond or stream margins in North America.

**Soil Description:** Moist-to-wet, rich loamy soil; do not allow roots to dry out.

## Recommended Uses:

Moist native borders, wet meadows, rain gardens and naturalized water margins; suitable for shallow water-garden containers.

## Additional Benefits:

Summer flowers support bumblebees and butterflies; foliage serves as a host for butterfly larvae.

## Culture:

Upright rhizomatous perennial with square stems, opposite toothed leaves and lilac-purple two-lipped flowers on slender stalks in the upper leaf axils.

## General Maintenance Level: Low

Maintain moisture and manage unwanted seedlings or spreading rhizomes.

Allow naturalization where space permits.

**Problems:** No major pest or disease problem is reported in the reviewed accounts. Self-seeding and creeping rhizomes may need control in small plantings.

**Condition Comments:** Partial shade is useful in moist plantings. In water-garden containers, keep only shallow water over the soil rather than submerging the plant deeply.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Monarda didyma*

**Scarlet bee balm / Oswego tea / Red bergamot**





*Images: Stacy Hodes · CC BY 4.0 [license] (resized); Stacy Hodes · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Scarlet red | **Height:** 2 - 4 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds, Moths | **Tolerates:** Deer, Rabbits, Clay Soil, Wet Soil, Black Walnut

**Native Habitats:** Moist woods, bottomlands, thickets and stream banks in eastern North America, including the Appalachians.

**Soil Description:** Rich, humus-rich, moisture-retentive soil with suitable drainage; tolerates clay and wet conditions.

## Recommended Uses:

Moist perennial borders, native meadows, rain gardens and butterfly or hummingbird gardens where spreading colonies fit.

## Additional Benefits:

Bright flowers feed pollinators, aromatic foliage adds interest, and standing hollow stems can provide nesting sites for native bees.

## Culture:

Spreading perennial with square stems and opposite serrated aromatic leaves. Dense scarlet tubular flower heads sit above reddish leafy bracts; colonies expand by underground stems and seed.

## General Maintenance Level: Medium

Divide crowded clumps about every 3–4 years and manage spreading growth.

Deadhead to extend flowering or reduce self-seeding; retain some hollow dead stems where suitable for nesting bees.

**Problems:** Powdery mildew and rust can occur, especially in crowded or stressed plants. Foliage may decline after bloom; spreading colonies may crowd neighboring plants.

**Condition Comments:** Avoid dry soil and crowded growth. Space plants for air circulation and water during drought to reduce stress.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Monarda fistulosa*

**Wild bergamot / Bee balm**





*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Lavender, Pink | **Height:** 2 - 4 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds, Moths | **Tolerates:** Deer, Rabbits, Drought, Clay Soil, Dry Soil, Shallow Rocky Soil, Black Walnut

**Native Habitats:** Prairies, dryish open woods, glade margins, fields and roadside habitats across much of North America.

**Soil Description:** Well-drained dry-to-medium soil; tolerates clay, shallow rocky soils and a range of soil fertility and pH.

## Recommended Uses:

Native meadows, naturalized borders, pollinator gardens and cut-flower plantings with suitable drainage.

## Additional Benefits:

Summer flowers provide nectar for pollinators, aromatic foliage adds interest, and retained hollow stems can shelter nesting bees.

## Culture:

Clumping perennial with hollow square stems and opposite aromatic gray-green leaves. Dense rounded heads of lavender to pink two-lipped flowers sit above leafy bracts; rhizomes and seed can form colonies.

## General Maintenance Level: Medium

Divide crowded colonies about every 3–4 years and thin dense growth.

Deadhead as desired to extend flowering or reduce self-sowing; retain some hollow dead stems for nesting bees.

**Problems:** Powdery mildew may be significant in crowded, rainy or drought-stressed conditions; rust can also occur. Rhizomes and self-sowing may spread beyond a small planting.

**Condition Comments:** Provide air circulation and drainage. Water during prolonged drought if plants become stressed; drought tolerance does not prevent powdery mildew.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Muenchhusia moscheutos*

**Swamp rose-mallow / Crimson-eyed rose-mallow**





*Images: H. Zell · CC BY-SA 3.0 [license] (resized); Tom Glasgow · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pink | **Height:** 3 - 7 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5 - 9

**Attracts:** Butterflies, Moths, Hummingbirds, Bees | **Tolerates:** Wet Soil, Heat, Humidity, Some Salt Exposure

**Native Habitats:** Wetlands, marshes, creek and river edges, wet meadows and other moist low ground in eastern and central North America.

**Soil Description:** Moist, organically rich loam or silt, with some sand acceptable; maintain dependable moisture.

## Recommended Uses:

Moist borders, low spots, pond and stream margins, native groups and seasonal screens where mature space and moisture are available.

## Additional Benefits:

Large summer flowers support pollinators, foliage supports caterpillars and dead stems can provide native-bee nesting sites.

## Culture:

Woody-based herbaceous perennial with multiple upright stems and large five-petalled white or pink flowers, often with a dark central eye and prominent staminal column. Alternate leaves are paler and hairy beneath; capsules follow bloom.

## General Maintenance Level: Low

Maintain consistent moisture and remove spent flowers if desired.

Optional pinching encourages bushier growth; manage old stems while retaining some nesting habitat where practical.

**Problems:** Japanese beetles can damage foliage; aphids, whiteflies and scale may occur. Leaf spots, blights, rusts and cankers are possible, and dry soil can cause leaf scorch.

**Condition Comments:** Shoots emerge late in spring but then grow rapidly. Protect from strong wind and provide air circulation; each flower is short-lived, but new buds extend the display.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Penstemon digitalis*

**Foxglove beardtongue / Tall white beardtongue**





*Images: Andrey-Zharkikh · CC BY 4.0 [license] (resized); Cbaile19 · CC0 1.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 5 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** Apr, May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Bees, Butterflies, Hummingbirds, Moths | **Tolerates:** Deer, Drought, Clay Soil, Dry Soil

**Native Habitats:** Prairies, fields, low moist openings, wood margins and open woodland in eastern and central North America.

**Soil Description:** Well-drained loam, clay loam or sandy soil; adapts to several pH conditions. Avoid persistently wet, poorly drained ground.

## Recommended Uses:

Sunny native borders, meadows, pollinator gardens and suitable drained rain-garden plantings; also useful for cut flowers.

## Additional Benefits:

White spring-to-early-summer flowers feed visiting pollinators; basal foliage can add cool-season interest in suitable climates.

## Culture:

Clump-forming perennial with basal rosettes, upright stems and panicles of white two-lipped tubular flowers. Basal leaves are broader than the stem leaves; a sterile fifth stamen gives the genus its beardtongue name.

## General Maintenance Level: Medium

Remove spent brown stalks as desired and manage seedlings.

Retain seed or seedlings for renewal where plants are short-lived; basal rosettes can provide winter cover in mild climates.

**Problems:** Root rot can occur in wet, poorly drained soils, and leaf spots are occasional. Plants may self-sow or spread in favorable garden conditions.

**Condition Comments:** Best flowering in sun, with light shade tolerated. Established plants tolerate some drought and brief inundation, but persistent poor drainage risks root rot.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Phlox divaricata*

**Woodland Phlox / Blue Phlox / Wild Sweet William**





*Images: Aaron Carlson · CC BY-SA 4.0 [license] (resized); Joshua Mayer · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Blue, Lavender, Pink, White | **Height:** 1 - 1.5 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Mar, Apr, May | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Clay Soil, Dry Shade, Some Drought, Deer

**Native Habitats:** Rich, moist deciduous woods and bluffs, woodland paths, seasonal floodplains and stream banks.

**Soil Description:** Rich, moist, well-drained soil with organic matter; sand, loam or clay. Occurs in acidic and calcareous soils.

## Recommended Uses:

Woodland groundcover, shaded native gardens, border fronts, rock gardens and cover above early spring bulbs.

## Additional Benefits:

Fragrant spring flowers provide nectar for butterflies and other pollinators. Rosettes can provide winter interest in mild climates.

## Culture:

Rhizomatous perennial that gradually forms colonies. Leafy stems spread along the ground and root at nodes.

## General Maintenance Level: Medium

Remove spent blooms and maintain soil moisture.

Cut stems back after flowering to help reduce mildew; allow airflow between plants.

**Problems:** Powdery mildew can be serious. Spider mites are more troublesome in hot, dry conditions; rabbits may browse foliage.

**Condition Comments:** Height varies: NC State describes 6–12 inches, while New Moon lists 12–18 inches. Spring flowering varies with location. Maintain moisture and airflow; do not let the soil dry completely.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PRN*]*

# *Phlox paniculata*

**Garden phlox / Summer phlox**





*Images: titanium22 · CC BY-SA 2.0 [license] (resized); K. Andre · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Purple, White | **Height:** 2 - 4 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 8b

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Deer, Clay Soil, Black Walnut

**Native Habitats:** Rich open woods, thickets, meadows and moist roadsides in the eastern United States.

**Soil Description:** Moist, fertile, organic, well-drained loam or suitable clay soil.

## Recommended Uses:

Moist perennial borders, native gardens and butterfly or hummingbird plantings with adequate sun and spacing.

## Additional Benefits:

Fragrant summer flower clusters provide color and nectar for visiting insects and hummingbirds.

## Culture:

Upright clump-forming perennial with opposite lance-shaped leaves and dense terminal panicles of fragrant five-lobed tubular flowers. Many garden cultivars derive from this species.

## General Maintenance Level: Medium

Remove spent flower clusters as desired and thin crowded stems.

Clean up diseased foliage after the growing season; taller stems may need support.

**Problems:** Powdery mildew, phlox bugs, root rot and spider mites can occur. Drought and poor air circulation increase problems; tall growth may flop.

**Condition Comments:** Space plants for air circulation, keep roots cool and water during dry spells. Avoid overhead watering where possible.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PRN*]*

# *Phlox stolonifera*

**Creeping phlox / Star rock phlox**





*Images: Michael Wolf · CC BY-SA 3.0 [license] (resized); Ghislain118 · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Violet, White | **Height:** 0.5 - 1 ft | **Spread:** 0.75 - 1.5 ft | **Bloom Time:** Apr, May | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 5 - 9

**Attracts:** Butterflies, Hummingbirds, Moths | **Tolerates:** Deer, Established Drought, Shade, Erosion

**Native Habitats:** Appalachian woodland and wooded stream banks, from Pennsylvania south to Georgia.

**Soil Description:** Humus-rich, evenly moist, well-drained soil; suitable organic woodland loam is preferred.

## Recommended Uses:

Woodland ground cover, shaded border fronts, native plantings and shaded rock-garden pockets with suitable drainage.

## Additional Benefits:

Fragrant spring flowers supply early nectar, while low leafy mats add ground-level texture and cover.

## Culture:

Low perennial with creeping leafy stolons that root at nodes and form mats. Upright spring flower stems rise above broader-leaved vegetative shoots; foliage can remain semi-evergreen.

## General Maintenance Level: Low

Trim spent flowering shoots as desired and manage spreading mats or seedlings.

Keep air moving through growth and maintain suitable moisture and drainage.

**Problems:** Powdery mildew, spider mites and slugs can occur. Rabbits may nibble plants, and stolons or self-sowing can spread beyond a small planting.

**Condition Comments:** Provide bright shade and good air circulation. Keep newly planted mats moist during the first year; hot dry sites favor mites and wet sites favor slugs.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Physostegia virginiana*

**Obedient plant / False dragonhead**





*Images: BotBln · CC BY-SA 3.0 [license] (resized); Susan Strine · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Pale lilac | **Height:** 3 - 4 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Deer, Clay Soil, Wet Soil

**Native Habitats:** North American wet meadows, prairies, stream banks, seepages, damp thickets and other moist openings.

**Soil Description:** Moist, moderately fertile, well-drained soil; suitable clay or loam can be used.

## Recommended Uses:

Native meadows, cottage gardens and moist borders with space for expanding colonies.

## Additional Benefits:

Summer flower spikes provide long seasonal color and nectar for pollinators and hummingbirds.

## Culture:

Rhizomatous perennial with square stems and opposite sharply toothed leaves. Pink tubular flowers open from the bottom of upright spikes upward and remain temporarily positioned when gently moved.

## General Maintenance Level: Medium

Divide or remove unwanted spreading growth and support tall stems if needed.

Check colony margins regularly; shallow-rooted offshoots can be lifted.

**Problems:** Plants can spread aggressively and flop in rich soil or shade. Aphids and blackspot may occur; crowded colonies need management.

**Condition Comments:** Avoid excessive fertility or deep shade. Stems may need support, and rhizomes can spread vigorously in moist rich soil.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Pycnanthemum virginianum*

**Virginia mountain mint / American mountain mint**





*Images: Frank Mayfield · CC BY-SA 2.0 [license] (resized); Frank Mayfield · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 2 - 3 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 7b

**Attracts:** Bees, Wasps, Flies, Butterflies, Beetles | **Tolerates:** Clay Soil, Established Drought, Deer

**Native Habitats:** Moist meadows, swamps, thickets and open ground near streams or ponds in North America.

**Soil Description:** Average-to-moist, well-drained loam, sand, clay or gravelly soil.

## Recommended Uses:

Pollinator gardens, native borders, meadows and naturalized openings near ponds or streams with suitable drainage.

## Additional Benefits:

Dense small flower heads attract many beneficial insects, while aromatic foliage adds scent and texture.

## Culture:

Many-branched perennial with narrow opposite green leaves and small flattened heads of white, often purple-dotted flowers. Crushed leaves and stems have a strong mint scent; rhizomes form colonies.

## General Maintenance Level: Low

Manage unwanted rhizomes or divide expanding colonies as needed.

Remove spent stems as desired and maintain suitable moisture.

**Problems:** No major pest or disease issue is reported in the reviewed accounts. Colonies can expand, and drought may reduce lower foliage quality.

**Condition Comments:** Rhizomes can form colonies in favorable moist sites. Drought may yellow and shed lower leaves; drier soil tends to limit spread.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Rudbeckia fulgida*

**Orange coneflower / Perennial black-eyed Susan**





*Images: Lucy Bradley · CC BY 4.0 [license] (resized); Lucy Bradley · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow-orange | **Height:** 2 - 3 ft | **Spread:** 2 - 2.5 ft | **Bloom Time:** Jul, Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Butterflies, Moths, Pollinators | **Tolerates:** Moderate Deer Browsing, Established Drought, Clay Soil, Dry Soil, Shallow Rocky Soil, Urban Conditions

**Native Habitats:** Eastern North American open woods, meadows, pastures and other open habitats.

**Soil Description:** Average to organically rich, well-drained soil; clay and dry sites are tolerated once established, but avoid soggy soil.

## Recommended Uses:

Perennial borders, cottage and native gardens, meadows and suitable drained rain-garden plantings.

## Additional Benefits:

Long late-summer color supports flower visitors, larval hosts and seed-feeding birds; basal foliage can cover the ground in winter.

## Culture:

Rhizomatous perennial with basal leaf rosettes and upright flowering stems. Yellow-orange rays surround dark central disks; persistent rosettes and seedheads add cool-season structure.

## General Maintenance Level: Low

Divide enlarging clumps as needed and deadhead selectively.

Retain some seedheads for winter food; maintain suitable drainage.

**Problems:** Aphids, mildews, aster yellows and leaf spots can occur. Deer may cause occasional damage; rhizomes can enlarge clumps.

**Condition Comments:** Provide air circulation and moisture during establishment. Clumps spread slowly by rhizomes; leave some seedheads for birds where practical.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*] [NMN*]*

# *Rudbeckia hirta*

**Black-eyed Susan / Gloriosa daisy**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Randy Harter · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow, Orange-yellow | **Height:** 2 - 3 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Birds, Butterflies, Moths, Pollinators | **Tolerates:** Moderate Deer Browsing, Drought, Clay Soil, Heat, Moderate Salt

**Native Habitats:** North American prairies, meadows, pastures, savannas, woodland edges and disturbed openings.

**Soil Description:** Well-drained clay, loam or sandy soil with moderate fertility; avoid excessive nitrogen and soggy ground.

## Recommended Uses:

Native meadows, cottage gardens, borders, annual displays and naturalized pollinator plantings with good drainage.

## Additional Benefits:

Summer flowers feed visiting insects; seeds feed birds and renew short-lived stands through self-sowing.

## Culture:

Hairy-stemmed herbaceous plant that may behave as an annual, biennial or short-lived perennial. Basal and stem leaves are rough; yellow-orange flower heads have dark domed centers.

## General Maintenance Level: Low

Deadhead selectively or retain seedheads for reseeding and birds.

Allow seed to mature before meadow mowing where renewal is desired; thin unwanted seedlings.

**Problems:** Powdery mildew, slugs and snails may occur. Seedlings can be abundant, and individual plants may be short-lived; avoid poorly drained sites.

**Condition Comments:** Often short-lived, but self-sows in open soil. Keep some seedheads for renewal and wildlife; deadhead where excess seedlings would be unwanted.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Rudbeckia laciniata*

**Cutleaf coneflower / Green-head coneflower**





*Images: Kathy Sill · CC BY 4.0 [license] (resized); Kathy Sill · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 2 - 9 ft | **Spread:** 1.5 - 3 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Bees, Butterflies, Moths, Birds | **Tolerates:** Wet Soil, Seasonal Flooding, Heat, Humidity

**Native Habitats:** North American rich low woods, wet meadows, alluvial thickets, stream banks and moist roadside ditches.

**Soil Description:** Moist, average to organically rich, well-drained soil; avoid dry exposures that scorch or wilt foliage.

## Recommended Uses:

Large moist meadows, naturalized native areas and spacious borders where tall spreading colonies fit.

## Additional Benefits:

Late-summer flowers feed insects, autumn seeds feed birds, and retained hollow stems can shelter nesting bees.

## Culture:

Tall rhizomatous perennial with deeply lobed lower leaves and less divided upper leaves. Yellow rays droop around raised greenish central disks; basal rosettes can persist through winter.

## General Maintenance Level: Medium

Divide or remove unwanted spreading growth and support tall stems if needed.

Deadhead selectively or retain seedheads and some hollow stems for wildlife.

**Problems:** Rhizomes can spread aggressively and tall stems may flop. Dry sites can produce wilted, brown-edged foliage; deer browsing is possible.

**Condition Comments:** Allow substantial space for rhizomes and tall growth. Deer may browse foliage; plants often recover. Tall stems may need support.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Silphium perfoliatum*

**Cup-plant / Common Cup-plant**





*Images: Ryan Hodnett · CC BY-SA 2.0 [license] (resized); Udo Schmidt · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 4 - 8 ft | **Spread:** 1 - 3 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds, Songbirds, Pollinators | **Tolerates:** Clay Soil, Wet Soil, Some Drought Once Established

**Native Habitats:** Moist woods, prairies, low ground, wet meadows, lake and river margins, and ditches.

**Soil Description:** Moist to wet sandy, loamy or clay soil; loam is preferred.

## Recommended Uses:

Large native or wildflower gardens, moist meadows, naturalized areas and pond margins. Allow space for expanding colonies.

## Additional Benefits:

Seeds feed goldfinches and other birds. Joined leaf bases collect rainwater; flowers provide nectar and pollen for insects.

## Culture:

Long-lived perennial with deep roots, rhizomes and abundant self-seeding. Seed-grown plants may first flower in their second season.

## General Maintenance Level: Low

Monitor self-seeding and remove unwanted young plants.

Remove unwanted seedlings before deep roots establish; established plants can be difficult to move.

**Problems:** Red aphids may occur. Tall, top-heavy stems can topple in wind, especially in soggy soil. Self-seeding can be aggressive; drought can damage leaves and buds.

**Condition Comments:** Give colonies ample space: NC State lists individual width at 1–3 feet, while New Moon reports 4–6 feet or more. Plants can reach 9–10 feet. Flowering dates vary by region; drought can damage foliage and buds.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [NMN]*

# *Solidago nemoralis*

**Gray goldenrod / Old-field goldenrod**



*Images: Joshua Mayer · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 0.5 - 2 ft | **Spread:** 0.5 - 2 ft | **Bloom Time:** Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Bees, Butterflies, Moths, Birds | **Tolerates:** Deer, Drought, Dry Soil, Shallow Rocky Soil, Poor Soil

**Native Habitats:** North American old fields, pastures, dry open woods, sandy or rocky openings and roadsides.

**Soil Description:** Dry-to-medium, slightly acidic, well-drained sandy, rocky or average soil; tolerates poor fertility.

## Recommended Uses:

Dry native meadows, cottage gardens, naturalized areas and difficult poor-soil sites where spreading growth is acceptable.

## Additional Benefits:

Late yellow plumes feed insects, foliage supports moth larvae, and mature seed provides food for birds.

## Culture:

Low rhizomatous perennial with grayish hairy stems and leaves. Slender, often arching one-sided plumes carry many small yellow flower heads, followed by hairy seed structures.

## General Maintenance Level: Low

Manage unwanted seedlings or spreading rhizomes as needed.

Remove selected flower heads before seed dispersal where excessive self-sowing is unwanted.

**Problems:** Rust, mildews, leaf spots, anthracnose, beetles, aphids or galls may occur. Poor drainage can cause root rot; rhizomes and seedlings may spread.

**Condition Comments:** Rich soil can make plants taller and more vigorous. Allow room for rhizomes or seedlings; avoid poorly drained ground.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Solidago sempervirens*

**Seaside goldenrod / Northern seaside goldenrod**





*Images: Katja Schulz · CC BY 4.0 [license] (resized); Katja-Schulz · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 2 - 8 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Bees, Butterflies, Moths, Birds | **Tolerates:** Salt Spray, Deer, Poor Sandy Soil

**Native Habitats:** Coastal dunes, dune slacks, salt marshes, maritime wet grasslands and pinelands.

**Soil Description:** Moist, well-drained sandy coastal soil; tolerates poor sand and substantial salt exposure.

## Recommended Uses:

Sunny coastal native gardens, sandy borders and suitable salt-exposed landscape plantings with room for tall growth.

## Additional Benefits:

Late flowers support visiting insects, while robust foliage and yellow plumes add coastal fall interest.

## Culture:

Clump-forming coastal perennial with smooth fleshy leaves, a basal rosette and tall stalks bearing dense yellow flower clusters. Lower flowering branches may arch, with heads mostly on one side.

## General Maintenance Level: Low

Pinch growing tips in early summer only if a more compact plant is desired.

Use suitable sandy drainage and avoid excessive fertilization.

**Problems:** Rust, powdery mildew and leaf spots may occur. Provide suitable drainage; individual plants can become tall and broad in favorable sites.

**Condition Comments:** Allow for tall flowering stalks and coastal-site variability. Growing tips may be pinched in early summer for a more compact habit; avoid excessive fertilizer.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PNL]*

# *Stokesia laevis*

**Stokes' aster**




*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Violet blue | **Height:** 1 - 2 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5 - 9

**Attracts:** Bees, Butterflies | **Tolerates:** Deer, Rabbit, Drought

**Native Habitats:** Southeastern coastal-plain wet pinewoods, savannas, bottomlands and ditches.

**Soil Description:** Moist, well-drained sandy or average soil, preferably acidic; avoid persistent winter wetness.

## Recommended Uses:

Sunny or lightly shaded border fronts, cottage and pollinator gardens, small groups and drained pond margins.

## Additional Benefits:

Summer flowers supply nectar to butterflies and bumblebees; persistent rosettes add winter interest in suitable climates.

## Culture:

Low perennial with lance-shaped basal rosettes and erect leafy stems carrying fringed violet-blue heads. Rosettes can persist in mild winters; occasional later rebloom may follow deadheading.

## General Maintenance Level: Low

Remove spent flowers and flowering stems to encourage additional bloom.

Cut back to basal foliage after flowering; divide crowded colonies when needed rather than on a mandatory schedule.

**Problems:** Wet winter soil can kill plants. Caterpillars may feed on foliage and flower stems may flop after heavy rain.

**Condition Comments:** Full sun promotes flowering. Winter mulch may help near the cold end of its range, but drainage is essential.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN*]*

# *Symphyotrichum laeve*

**Smooth aster / Smooth blue aster**





*Images: Frank Mayfield · CC BY-SA 2.0 [license] (resized); K. Andre · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Violet blue, Yellow centers | **Height:** 2 - 4 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Sep, Oct | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Bees, Butterflies, Birds, Small Mammals | **Tolerates:** Drought, Erosion, Dry Soil, Shallow Rocky Soil

**Native Habitats:** North American prairies, rocky glades, dry open woods, meadow edges, thickets and roadside banks.

**Soil Description:** Average, moderately fertile, dry-to-medium, well-drained soil; adaptable to several textures.

## Recommended Uses:

Late-season native borders, cottage gardens, sunny slopes and meadow plantings with room to naturalize.

## Additional Benefits:

Late flowers feed bees and butterflies; foliage supports Pearl Crescent larvae and seeds feed birds and small mammals.

## Culture:

Upright perennial with smooth blue-green foliage and autumn heads of violet-blue rays around yellow discs. Smooth upper leaves partly clasp the stems.

## General Maintenance Level: Low

Manage unwanted seedlings where naturalization is not desired.

Support tall stems if they lean; otherwise routine care is modest.

**Problems:** No significant pest or disease problems are reported by the selected sources. Some stems may need support and seedlings may spread.

**Condition Comments:** Self-seeding and spreading growth can form colonies; allow space or manage unwanted seedlings.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Symphyotrichum novae-angliae*

**New England Aster**





*Images: Marisa Back · CC BY 2.0 [license] (resized); Caumasee · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purple, Pink | **Height:** 3 - 6 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 8b

**Attracts:** Bees, Butterflies, Pollinators, Songbirds, Small Mammals | **Tolerates:** Clay Soil, Deer, Some Drought

**Native Habitats:** Moist meadows and prairies, open woods, stream banks, thickets and disturbed sites.

**Soil Description:** Moist, fertile, well-drained soils, including clay loam. Avoid prolonged drought and provide good airflow.

## Recommended Uses:

Fall native or pollinator gardens, moist meadows, rain gardens and naturalized pond or stream margins. Group behind shorter plants.

## Additional Benefits:

Late-season nectar supports migrating monarchs and other butterflies. Seeds feed birds and small mammals; foliage supports Pearl Crescent caterpillars.

## Culture:

Upright, clump-forming perennial with hairy stems and clasping leaves. Can self-seed and expand where conditions suit it.

## General Maintenance Level: Medium

Divide clumps and support tall stems as needed.

Spring pinching encourages bushier growth but delays bloom. Finish height-control pruning by the end of June; remove spent stems if unwanted seeding is a problem.

**Problems:** Powdery mildew, aster wilt and stem rot can occur. Watch for aphids, spider mites and leaf miners. Tall stems may require staking.

**Condition Comments:** Full sun is preferred; partial shade is tolerated. Severe drought can damage foliage. Divide clumps periodically to maintain vigor and avoid dead centers.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Symphyotrichum novi-belgii*

**New York Aster / Michaelmas Daisy**





*Images: Uwe W. · CC BY-SA 3.0 [license] (resized); Rob Young · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purple, Pink, White | **Height:** 3 - 4 ft | **Spread:** 3 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 8b

**Attracts:** Bees, Butterflies, Pollinators, Songbirds, Small Mammals | **Tolerates:** Clay Soil, Sandy Soil, Deer

**Native Habitats:** Fresh to slightly brackish tidal marshes, marsh borders, moist shores and other coastal wet areas.

**Soil Description:** Moist, well-drained sandy, loamy or clay soil. Give plants space for airflow and water during prolonged drought.

## Recommended Uses:

Moist meadows, seaside and wildlife gardens, pollinator plantings and grouped perennial borders with room for mature height.

## Additional Benefits:

Late-season nectar for butterflies and bees. Pearl Crescent caterpillars use the foliage; seeds feed birds and small mammals.

## Culture:

Clump-forming perennial with narrow clasping leaves and many late-season flower heads. Prefers sunny, moist sites; can self-seed.

## General Maintenance Level: Low

Divide clumps and control unwanted self-seeding as needed.

Early-season cutting can reduce height and strengthen stems. Finish height-control pruning by the end of June so flowers can develop.

**Problems:** Powdery mildew can occur, especially with crowding or poor growing conditions. Severe drought can damage foliage; undivided clumps may die out in the center.

**Condition Comments:** Species plants are taller than many garden cultivars. Maintain moisture and airflow; divide established clumps periodically to prevent dead centers.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Tiarella cordifolia*

**Foamflower / False miterwort**





*Images: Ghislain118 · CC BY-SA 3.0 [license] (resized); Cathy Dewitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pale pink | **Height:** 0.75 - 1 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Apr, May, Jun | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 9

**Attracts:** Bees, Butterflies | **Tolerates:** Deer, Rabbit, Heavy Shade

**Native Habitats:** Eastern North American moist deciduous woods, coves, stream banks and well-drained bottomlands.

**Soil Description:** Moist, humus-rich, well-drained woodland soil, neutral to slightly acidic.

## Recommended Uses:

Shaded woodland gardens, border fronts, moist rock gardens and naturalized ground cover along drained stream banks.

## Additional Benefits:

Spring flowers support pollinators, while foliage and spreading colonies provide woodland texture through much of the year.

## Culture:

Low, runner-forming perennial with heart-based lobed leaves and airy spikes of small white or pale pink flowers. Foliage can persist and bronze in mild winters.

## General Maintenance Level: Low

Remove damaged old foliage as new growth begins; remove spent flower spikes if desired.

Separate established plantlets only after they have developed their own roots.

**Problems:** Drought and saturated winter soil are unsuitable. Selected sources report no serious routine pest or disease problem.

**Condition Comments:** Keep roots evenly moist while avoiding waterlogged winter soil. Shade and organic matter help retain suitable moisture.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Verbena hastata*

**Blue vervain / Swamp vervain**





*Images: Judy Gallagher · CC BY 4.0 [license] (resized); James St. John · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purplish blue | **Height:** 2 - 6 ft | **Spread:** 1 - 2.5 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Bees, Butterflies, Moths, Birds, Hummingbirds | **Tolerates:** Wet Soil

**Native Habitats:** North American moist meadows, thickets, marshes, ditches, stream banks and river-bottom prairies.

**Soil Description:** Average, moist to wet loam, clay or sandy soil.

## Recommended Uses:

Moist native meadows, informal borders, rain gardens and suitable pond or water-garden margins.

## Additional Benefits:

Summer flowers supply nectar and pollen; foliage hosts butterfly and moth larvae, and seeds feed songbirds.

## Culture:

Upright perennial with square stems and opposite, toothed, lance-shaped leaves. Branching pencil-thin flower spikes open a few tiny blooms at a time from bottom to top.

## General Maintenance Level: Low

Manage unwanted seedlings and spread where needed.

Optional early tip pinching encourages branching; allow suitable space for colony renewal.

**Problems:** Plants may self-seed or spread into colonies and can be short-lived. Rabbits may browse foliage; selected sources report few serious disease problems.

**Condition Comments:** Slow rhizome spread and self-seeding can form colonies. Plants may be short-lived; pinch tips if a bushier habit is desired.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Vernonia noveboracensis*

**New York ironweed**





*Images: Krzysztof Ziarnek, Kenraiz · CC BY-SA 4.0 [license] (resized); rockerBOO · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Deep purple | **Height:** 4 - 6 ft | **Spread:** 3 - 4 ft | **Bloom Time:** Aug, Sep | **Sun:** Full Sun | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Bees, Butterflies, Birds | **Tolerates:** Deer, Clay Soil, Wet Soil, Black Walnut

**Native Habitats:** Eastern North American moist thickets, stream banks, low meadows and other damp openings.

**Soil Description:** Rich, moist, slightly acidic soil is preferred; average moist-to-wet soils and clay are also tolerated.

## Recommended Uses:

Backs of moist borders, native meadows, rain gardens and suitable stream or pond margins.

## Additional Benefits:

Flowers feed bees and butterflies, seeds feed birds, and dead hollow stems provide nesting sites for native bees.

## Culture:

Tall upright perennial with alternate, pointed, toothed leaves. Loose terminal clusters contain tiny deep-purple disc flowers without rays, followed by rusty seed clusters.

## General Maintenance Level: Low

Remove selected spent heads if unwanted self-seeding is a concern.

Retain some dead stems at 12–24 inches for stem-nesting bees; optional spring pruning can produce shorter flowering stems.

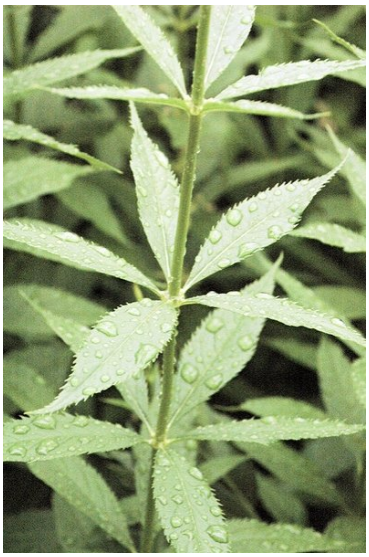
**Problems:** Self-sown seedlings may need control. Selected species sources report no significant routine insect or disease problem.

**Condition Comments:** Allow space for tall stems and self-sowing. Optional spring cutting can reduce final height; this is not a milkweed and does not produce milkweed pods.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Veronicastrum virginicum*

**Culver’s root**





*Images: Frank Mayfield · CC BY-SA 4.0 [license] (resized); Joshua Mayer · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pale blue | **Height:** 4 - 7 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jun, Jul, Aug | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Bees, Butterflies, Moths | **Tolerates:** Deer, Wet Soil

**Native Habitats:** North American open woods, thickets, moist meadows, prairies and stream margins.

**Soil Description:** Average to rich, moist-to-wet, well-drained soil.

## Recommended Uses:

Vertical accents in moist native borders, cottage gardens, meadows and naturalized plantings.

## Additional Benefits:

Flowers supply pollen and nectar to varied insects, including bees, butterflies, moths and beneficial predatory insects.

## Culture:

Tall perennial with lance-shaped leaves in whorls around upright stems. Slender terminal flower spikes branch into a candelabra of tiny tubular blooms.

## General Maintenance Level: Low

Deadhead spent flower spikes if a longer display is desired.

Cut back after flowering to basal growth for fresh foliage and possible later rebloom; provide support if needed.

**Problems:** Plants can lean in excessive shade and may need support. Establishment is slow; selected sources report few serious routine pest problems.

**Condition Comments:** Allow several seasons for establishment. Provide enough light for strong stems and support plants if they lean in shade.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# Ferns

# *Athyrium angustum*

**Northern lady fern**





*Images: Ryan Hodnett · CC BY-SA 4.0 [license] (resized); Ryan Hodnett · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Sawflies | **Tolerates:** Rabbit, Heavy Shade

**Native Habitats:** Moist forests, forest edges, floodplains, swamps and wet-mesic openings of northern and eastern North America.

**Soil Description:** Rich, moist, well-drained woodland soil with humus; tolerates somewhat drier soil than many ferns.

## Recommended Uses:

Woodland and shade gardens, shaded borders and suitable stream or pond margins.

## Additional Benefits:

Delicate, finely divided green fronds provide texture and seasonal groundcover in shaded plantings. Foliage supports fern-feeding sawfly larvae; this is a host relationship, not floral nectar.

## Culture:

Deciduous clumping fern with finely divided fronds that narrow toward the base. Frond stalk scales and yellow spores help distinguish the northern taxon.

## General Maintenance Level: Low

Maintain woodland moisture and shelter from wind.

Divide clumps in spring when necessary to keep crowns at soil level.

**Problems:** MBG reports no serious insect or disease problems. Strong wind can break delicate fronds; exposed dry sites are unsuitable.

**Condition Comments:** Shelter delicate fronds from strong wind. This northern taxon is distinct from Southern Lady Fern; neither has flowers.

*Botanical references: [MBG] [WF]*

# *Athyrium asplenioides*

**Southern lady fern**





*Images: Jaknouse · CC BY-SA 4.0 [license] (resized); Homer Price · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Birds | **Tolerates:** Deer, Rabbit, Heavy Shade, Seasonal Flooding

**Native Habitats:** Moist woods, open thickets, meadows and occasional swamps in the central and eastern United States.

**Soil Description:** Humus-rich, neutral to acidic sandy or clay loam with medium to wet moisture and suitable drainage.

## Recommended Uses:

Shade-garden groundcover, moist woodland gardens and shaded stream or pond edges.

## Additional Benefits:

Lacy foliage forms textured groundcover; plants provide wildlife cover and material used in bird nests.

## Culture:

Deciduous rhizomatous fern with broad, lacy fronds. Fronds are widest near the base; shorter stalks and brown spores help distinguish the southern taxon.

## General Maintenance Level: Low

Maintain moist shaded conditions and shelter from wind.

Divide clumps in spring as needed to keep crowns at soil level; rhizomes gradually form groundcover.

**Problems:** Sources report no serious pest or disease issues. Wind can break fronds, and foliage may become tattered by midsummer.

**Condition Comments:** Protect fronds from strong wind and keep soil moist. Some fronds may look tattered by midsummer. Spore-bearing leaf undersides are not flowers.

*Botanical references: [MBG] [WF]*

# *Dryopteris marginalis*

**Marginal woodfern / Marginal shieldfern**





*Images: desultrix · CC BY-SA 2.0 [license] (resized); Kristine Paulus · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 1.5 - 2 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Toads, Lizards | **Tolerates:** Heavy Shade, Rabbits

**Native Habitats:** Shaded rocky woodland slopes, ledges, bluffs and crevices in eastern North America.

**Soil Description:** Moist, well-drained, humus-rich woodland soil; acidic, rocky soils are preferred and some lime tolerance is reported.

## Recommended Uses:

Shaded woodland and rock gardens, native plantings, borders and small groups among spring wildflowers.

## Additional Benefits:

Evergreen fronds provide winter structure and ground-level shelter. Birds use plant material for nests, and the foliage offers cover for small woodland animals.

## Culture:

Evergreen, vase-shaped fern with a single, nonspreading crown and deeply divided leathery fronds. Round sori lie near the margins of the pinnule undersides.

## General Maintenance Level: Low

Maintain suitable shaded woodland conditions.

Retain a natural leaf cover where appropriate and remove damaged old fronds as needed without disturbing the crown.

**Problems:** MBG reports no serious insect or disease problems. Heat and drying wind can reduce performance; moist soil still needs drainage.

**Condition Comments:** Protect from drying wind and excessive heat. Maintain woodland moisture with drainage; do not plant in standing water to compensate for full sun.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Matteuccia struthiopteris*

**Ostrich fern**





*Images: Harem Koh · CC BY-SA 2.0 [license] (resized); Wendell Smith · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 3 - 6 ft | **Spread:** 5 - 8 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Moths | **Tolerates:** Rabbits, Shade, Erosion, Clay Soil, Wet Soil

**Native Habitats:** Moist shaded woods and wooded river bottomlands. The broad Matteuccia species concept includes North American and Eurasian populations.

**Soil Description:** Rich soil with constant moisture; moist-to-wet clay or organic woodland soil is suitable.

## Recommended Uses:

Large moist shade plantings, woodland gardens and naturalized stream or pond margins where colonies have room to spread.

## Additional Benefits:

Arching green fronds provide strong seasonal texture; persistent brown fertile fronds add winter interest. Stems and roots provide larval food for the ostrich fern borer moth.

## Culture:

Deciduous fern with vase-shaped crowns of feathery sterile fronds and separate upright brown fertile fronds that persist into winter. North American plants are often treated as var. pensylvanica; this sheet follows the broader Matteuccia species concept.

## General Maintenance Level: Medium

Manage spreading colonies and maintain dependable moisture.

Remove unwanted offshoots where necessary; avoid exposed windy locations.

**Problems:** Spreading rhizomes can crowd nearby plants. Summer heat, drying soil and wind can damage fronds; foliage naturally becomes tattered later in the season.

**Condition Comments:** Best in cool summer climates and sheltered positions. Keep soil moist and allow substantial room for spreading rhizomes; avoid small confined beds.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Onoclea sensibilis*

**Sensitive fern / Bead fern**





*Images: peganum · CC BY-SA 2.0 [license] (resized); H. Zell · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 3 - 4 ft | **Spread:** 3 - 4 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 8

**Attracts:** Birds, Amphibians, Reptiles | **Tolerates:** Deer, Rabbits, Shade, Clay Soil, Wet Soil, Black Walnut

**Native Habitats:** Wet woods, floodplains, stream margins, thickets, swamps and marshes in eastern North America and eastern Asia.

**Soil Description:** Organic, consistently moist soil; moist-to-wet clay or loam is suitable with adequate soil aeration.

## Recommended Uses:

Moist woodland ground cover, shaded rain gardens and naturalized pond or stream margins with space for spreading growth.

## Additional Benefits:

Broad fronds and persistent bead-like fertile stalks add texture; dense growth shelters small animals.

## Culture:

Deciduous rhizomatous fern with broad bright-green sterile fronds and netted veins. Shorter stiff fertile fronds have bead-like brown segments that can persist into winter.

## General Maintenance Level: Medium

Thin or remove unwanted spreading growth.

Maintain moisture in summer and give colonies room to develop.

**Problems:** Rhizomes and spores can spread aggressively. Heat and dry soil may damage foliage; light frost blackens fronds as the plant enters dormancy.

**Condition Comments:** Protect from drying wind and maintain moisture. The first light frost can blacken the fronds; the established rhizome remains a hardy perennial.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Osmunda spectabilis*

**American royal fern / Royal fern**



*Images: Superior National Forest · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Sawflies | **Tolerates:** Rabbits, Shade, Wet Soil

**Native Habitats:** American swamps, wet woods, moist bluffs and ledges, stream margins and shallow-water edges.

**Soil Description:** Moist, rich, humus-rich acidic soil is preferred; maintain dependable moisture.

## Recommended Uses:

Moist native woodland borders, shaded water gardens and wet pond or stream margins.

## Additional Benefits:

Airy divided foliage, fertile tassel-like tips and yellow-to-brown autumn color provide seasonal texture. Foliage supports fern-feeding sawfly larvae; this is a host relationship, not floral nectar.

## Culture:

Deciduous American fern with broad twice-divided fronds and well-separated leaflets. Brown fertile clusters at the frond tips resemble tassels but are spore-bearing structures, not flowers. Formerly treated as Osmunda regalis var. spectabilis.

## General Maintenance Level: Low

Maintain moisture and allow space for the expanding clump.

Avoid exposed hot, dry conditions.

**Problems:** No major pest or disease issue is reported in the exact American account. Hot, dry conditions are unsuitable and can reduce foliage quality.

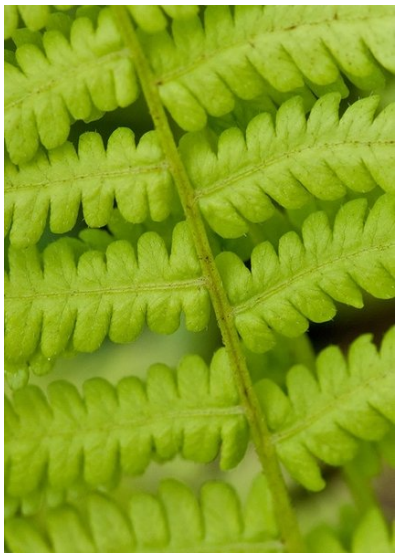
**Condition Comments:** Best with shade and cool summer conditions. Near-full sun requires a cool climate and constant moisture; taller growth is possible in favorable wet sites.

*Botanical references: [MBG] [WF]*

# *Osmundastrum cinnamomeum*

**Cinnamon fern**





*Images: desultrix · CC BY-SA 2.0 [license] (resized); Wayne National forest · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Birds | **Tolerates:** Deer, Rabbits, Shade, Black Walnut

**Native Habitats:** Moist boggy ground, stream margins, shaded ledges and bluffs. The species ranges through eastern North America, the American tropics and eastern Asia.

**Soil Description:** Moist-to-wet, humus-rich acidic soil; adapts to less rich conditions if moisture is dependable.

## Recommended Uses:

Moist shade borders, native woodland gardens, rain gardens and shaded pond or stream margins.

## Additional Benefits:

Cinnamon fertile stalks, green fronds and yellow autumn foliage add seasonal texture. Fuzzy young-frond hairs can provide nesting material for birds.

## Culture:

Deciduous fern with separate erect fertile fronds that turn cinnamon-brown and arching green sterile fronds. Rusty hairs occur beneath the bases of the leaf divisions; autumn foliage turns yellow.

## General Maintenance Level: Low

Maintain moisture and leave room for mature clumps.

Divide established plants only as needed; avoid allowing the root zone to dry out.

**Problems:** No major pest or disease issue is reported in the reviewed accounts. Dry soil can cause early dormancy or damage fronds.

**Condition Comments:** Keep roots moist and provide shade in hot climates. Slow initial establishment can be followed by vigorous, long-lived clumps.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Polystichum acrostichoides*

**Christmas fern**





*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Doug McGrady · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Not applicable | **Height:** 1 - 2 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Not applicable | **Sun:** Part Shade, Full Shade | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds | **Tolerates:** Deer, Rabbits, Established Drought, Shade, Erosion, Dry Soil, Shallow Rocky Soil

**Native Habitats:** Eastern North American rocky woods, wooded stream banks, slopes, thickets and other shaded habitats.

**Soil Description:** Organic, well-drained woodland soil, often rocky or sandy. Avoid compacted, stagnant or poorly drained conditions.

## Recommended Uses:

Woodland and shade gardens, shaded borders and well-drained rocky slopes where evergreen cover is useful.

## Additional Benefits:

Evergreen fronds add winter structure and ground-level cover; birds can use fern parts and scales as nesting material.

## Culture:

Evergreen clump-forming fern with arching leathery fronds. Leaflets have a distinctive basal ear-like lobe; fertile fronds narrow toward the tip and bear rows of sori beneath.

## General Maintenance Level: Low

Maintain suitable drainage and remove damaged old fronds only as needed.

Allow crowns to enlarge gradually; avoid burying crowns in wet debris.

**Problems:** Crown rot may occur in poorly drained soil, especially in winter. Excess sun and dry heat can stress foliage; occasional deer browsing is possible.

**Condition Comments:** Keep crowns well drained, especially in winter. Shade and cooler soil help prevent pale, stressed fronds; established clumps tolerate dryish sites.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# Grasses, Sedges, and Rushes

# *Andropogon gerardii*

**Big bluestem**





*Images: Matt Lavin · CC BY-SA 2.0 [license] (resized); USFWS Mountain Prairie · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Red, Purple | **Height:** 4 - 8 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jul, Aug, Sep, Oct | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Birds, Butterflies | **Tolerates:** Deer, Drought Once Established, Clay Soil, Moderate Salt, Erosion, Black Walnut

**Native Habitats:** Prairies, savannas, glades, fields, roadsides and other open grasslands.

**Soil Description:** Well-drained sand, loam or clay; adapts to poor soil and a range of acidity. Rich, wet conditions may produce weaker stems.

## Recommended Uses:

Prairie and meadow plantings, native screens, back-of-border accents and erosion-control slopes.

## Additional Benefits:

Red-orange fall foliage, amber winter stems and seedheads, and wildlife cover extend seasonal interest.

## Culture:

Tall warm-season bunchgrass with blue-green leaves, short rhizomes and distinctive three-part flower heads resembling a turkey foot.

## General Maintenance Level: Low

Cut old stems near ground level in late winter before new shoots.

Allow space for a tall clump and seedlings; avoid excess fertilizer.

**Problems:** Reviewed species sources report no serious pest or disease problems. Stems may flop in shade or overly rich, wet conditions.

**Condition Comments:** Slow to establish, then deep-rooted and drought tolerant. Excess shade, water or fertilizer can cause flopping. Seedheads persist beyond the flowering season.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Carex amphibola*

**Creek sedge / Eastern narrow-leaf sedge**



*Images: Summit Metro Parks · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 1 - 1.5 ft | **Spread:** 1 - 1.5 ft | **Bloom Time:** Mar, Apr, May, Jun | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Butterflies, Turtles | **Tolerates:** Deer, Shade

**Native Habitats:** Deciduous floodplain and mesic forests, flatwoods, seeps, creek slopes, lake margins and moist upland woods.

**Soil Description:** Deep, moist woodland soil or good garden soil; acidic loams and moist stream-side sites are described.

## Recommended Uses:

Shade-garden groundcover or edging, moist meadow groupings and native woodland plantings.

## Additional Benefits:

Fine foliage, seasonal groundcover, skipper-host value and seed food for turtles add ornamental and habitat interest.

## Culture:

Compact, fountain-shaped clumps with narrow glossy leaves and slender flower spikes. Foliage may be semi-evergreen in warm regions and deciduous farther north.

## General Maintenance Level: Low

Maintain suitable woodland moisture.

Allow compact clumps and occasional seedlings; it is not described as an aggressive seeder.

**Problems:** New Moon describes this species as pest resistant. Plants may need supplemental moisture during dry weather, especially in sun.

**Condition Comments:** Keep soil moist; sunnier sites may need summer irrigation. Flowering time varies by location.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Carex crinita*

**Fringed sedge**





*Images: Gilles Ayotte / Université Laval · CC BY-SA 4.0 [license] (resized); DouglasGoldman · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 1 - 3 ft | **Spread:** 1 - 2 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Butterflies, Moths | **Tolerates:** Deer, Wet Soil, Seasonal Flooding, Heavy Clay, Erosion

**Native Habitats:** Wet meadows and prairies, marshes, seeps, swamps, bogs, floodplain openings, shorelines and ditches.

**Soil Description:** Moist or wet soil, including heavy clay and low sites with seasonal flooding; can also grow in adequately moist upland gardens.

## Recommended Uses:

Wetland plantings, moist meadow masses, stream or pond margins, rain gardens and suitable drainage swales.

## Additional Benefits:

Drooping seedheads and moving foliage add texture; dense plantings offer wetland-bird cover and seed food.

## Culture:

Tufted sedge with glossy arching leaves and long, drooping fringe-like spikes. Rhizomes gradually form hummocks and colonies.

## General Maintenance Level: Low

Provide a consistently moist to wet site.

Allow room for colony growth or manage its spread in confined gardens.

**Problems:** MBG reports no serious insect or disease problems. Rhizomatous colony growth may need space or containment.

**Condition Comments:** Rhizomes can form broad colonies. Flowering stems may approach 4 ft in favorable sites; the listed width describes a clump rather than the eventual colony.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [NMN] [PNL]*

# *Carex grayi*

**Gray's sedge / Mace sedge**





*Images: rockerBOO · CC BY-SA 2.0 [license] (resized); son_gismo · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 2 - 3 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Butterflies, Birds, Small Mammals | **Tolerates:** Deer, Wet Soil, Seasonal Flooding, Erosion

**Native Habitats:** Moist or wet deciduous woods, floodplains, swamps, seeps, wet prairies, marshes and stream margins.

**Soil Description:** Moist or wet, fertile soil rich in organic matter; loam, silt and sand are suitable.

## Recommended Uses:

Moist native borders, wet meadows, rain gardens, pond edges, containers and grouped plantings.

## Additional Benefits:

Distinctive fruiting heads suit fresh or dried arrangements and remain ornamental after flowering; plants supply wildlife cover.

## Culture:

Slowly expanding clumps of pleated, glossy leaves bear small flowers followed by distinctive spiked, spherical fruiting heads.

## General Maintenance Level: Low

Maintain adequate moisture.

In garden plantings, old foliage can be cut back in late winter before new growth.

**Problems:** Reviewed sources report no serious pest or disease problems. Dry soil reduces performance, and hot climates may limit height.

**Condition Comments:** Do not allow the root zone to dry out. Star-shaped mace-like heads persist after flowering and can provide winter interest.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# *Carex laxiculmis*

**Spreading sedge / Glaucous woodland sedge**





*Images: Krzysztof Ziarnek, Kenraiz · CC BY-SA 4.0 [license] (resized); Jenn (McPhee) Dyson · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellowish white | **Height:** 0.5 - 1 ft | **Spread:** 0.5 - 1 ft | **Bloom Time:** May, Jun | **Sun:** Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 5 - 9

**Attracts:** Butterflies, Birds, Small Mammals | **Tolerates:** Deer, Heavy Shade, Occasional Wet Soil

**Native Habitats:** Rich woods, wooded slopes, floodplains, moist stream banks and swamp margins.

**Soil Description:** Moist, humus-rich woodland soil with suitable drainage; occasional wet periods are tolerated.

## Recommended Uses:

Woodland groundcover, shaded borders and path edges, moist stream or pond margins and containers.

## Additional Benefits:

Glaucous foliage adds color and texture; persistent leaves can provide winter interest and wildlife cover.

## Culture:

Compact clumps with arching blue-green to green leaves and slender, often leaning flowering stalks. Short rhizomes and occasional seedlings gradually expand a planting.

## General Maintenance Level: Low

Maintain moisture and remove old foliage in late winter as needed.

Supplemental water may be needed during hot, dry weather; allow slow naturalization.

**Problems:** Sources report no serious insect or disease problems. Hot, dry conditions may require irrigation; reliable drought tolerance is not established across the reviewed accounts.

**Condition Comments:** Keep soil moist, especially during hot, dry summers. Despite the name spreading sedge, it colonizes slowly. Sources disagree on drought tolerance, so do not treat it as a dry-site plant.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [NMN] [PRN*]*

# *Carex pensylvanica*

**Pennsylvania sedge / Oak sedge**





*Images: Kenraiz · CC BY-SA 4.0 [license] (resized); Erutuon · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green, Cream, Purple-brown | **Height:** 0.5 - 1 ft | **Spread:** 0.5 - 1 ft | **Bloom Time:** Apr, May | **Sun:** Part Shade, Full Shade | **Water:** Dry, Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Birds, Butterflies, Small Mammals | **Tolerates:** Deer, Dry Shade, Some Drought, Heavy Shade, Some Wet Soil

**Native Habitats:** Dry to mesic woods, wooded slopes, bluffs, oak savannas, clearings and upland prairie openings.

**Soil Description:** Well-drained dry to moist woodland soil; acidic loams and dappled shade are suitable.

## Recommended Uses:

Dry-shade groundcover, woodland lawns without heavy traffic, shaded edging and underplanting taller perennials.

## Additional Benefits:

Fine foliage creates a soft groundcover; plants support woodland wildlife and can reduce routine mowing in suitable shaded sites.

## Culture:

Fine-textured sedge with narrow leaves and long rhizomes that form loose tufts and broad mats. Foliage is semi-evergreen in mild climates.

## General Maintenance Level: Low

Mow or clip only if a short lawn-like appearance is desired.

A late-winter cutback can refresh foliage; leave unmown where a natural woodland groundcover is preferred.

**Problems:** Leaf spot, smut and rust can occur; NC State also lists aphids, anthracnose and fungus-gnat larvae. Heavy traffic and full sun are unsuitable.

**Condition Comments:** A lawn substitute for shaded sites, but unsuitable for heavy foot traffic. Keep new plantings moist until established; rhizomes can form broad colonies.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Carex plantaginea*

**Seersucker sedge / Plantain-leaf sedge**





*Images: Jay Turner · CC BY 2.0 [license] (resized); Kristine Paulus · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green, Purple-brown | **Height:** 0.75 - 1 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Mar, Apr | **Sun:** Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Butterflies, Birds, Small Mammals | **Tolerates:** Deer, Rocky Soil, Alkaline Soil, Some Dry Shade

**Native Habitats:** Rich, moist deciduous woods, wooded slopes and ravines in eastern North America.

**Soil Description:** Moist, humus-rich, well-drained woodland soil; also adapts to rocky or alkaline soils and some dry shade.

## Recommended Uses:

Shade-garden groundcover, woodland-path borders, native or sensory gardens and textural accents.

## Additional Benefits:

Distinctive leaf texture and persistent foliage provide interest beyond the spring flower spikes; clumps offer wildlife cover.

## Culture:

Clumping woodland sedge with broad, puckered green leaves and purple leaf sheaths. Foliage is evergreen to semi-evergreen depending on climate.

## General Maintenance Level: Low

Remove old foliage in late winter before new growth.

Plants slowly increase by short rhizomes and occasional seedlings; maintain woodland moisture.

**Problems:** NC State and MBG report no serious pest or disease problems. Full sun and repeated foot traffic are unsuitable.

**Condition Comments:** Keep in shade and protect from foot traffic. The usual foliage height is about 1 ft; temporary flowering stems can approach 2 ft. Flowering season varies by region.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Carex stipata*

**Awl-fruited sedge / Prickly sedge**





*Images: Matt Lavin from Bozeman, Montana, USA · CC BY-SA 2.0 [license] (resized); Matt Lavin · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 1.5 - 3 ft | **Spread:** 1 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Butterflies | **Tolerates:** Wet Soil, Clay Soil, Deer

**Native Habitats:** Moist or wet woodlands, swamps, seeps, wet prairies, pond margins and ditches.

**Soil Description:** Moist to wet sand, loam or clay; adaptable to heavy clay-loam and shallow fluctuating wet conditions.

## Recommended Uses:

Wetland plantings, upper shoreline margins, vegetated swales and naturalized moist areas.

## Additional Benefits:

Seedheads feed wetland birds; rapid establishment from seed can help stabilize moist soil.

## Culture:

Tuft-forming perennial sedge with arching leaves, compressible three-sided stems and congested, prickly heads with long-beaked fruit sacs.

## General Maintenance Level: Low

Maintain a moist to wet site.

Allow space for clump growth and seedlings.

**Problems:** A 1902 Ohio specimen documents this species as a host of the rust fungus Puccinia dioicae var. extensicola (also recorded as P. extensicola). Frequency and severity in managed plantings are not established.

**Condition Comments:** Keep soil moist to wet. Clumps spread slowly by short rhizomes but can establish readily from seed. Flowering stems may lean as they age.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PNL]*

# *Carex stricta*

**Tussock sedge**





*Images: Gilles Ayotte / Université Laval · CC BY-SA 4.0 [license] (resized); Gilles Ayotte / Université Laval · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Reddish brown | **Height:** 1 - 3 ft | **Spread:** 1 - 2 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Butterflies, Moths, Turtles | **Tolerates:** Deer, Wet Soil, Seasonal Flooding, Heavy Clay, Brief Drought, Erosion

**Native Habitats:** Sedge meadows, seeps, fens, wet prairies, marsh margins, swamps and seasonally wet lowlands.

**Soil Description:** Moist, mucky to wet soil, including heavy clay and shallow standing water; adequate moisture is needed away from wetlands.

## Recommended Uses:

Naturalized wetland masses, shorelines, wet meadows, pond or stream margins and suitable drainage swales.

## Additional Benefits:

Tussocks and colonies provide nesting cover and seed food for wetland wildlife; retained foliage adds seasonal structure.

## Culture:

Rhizomatous wetland sedge forming raised tussocks with arching green leaves above retained straw-colored foliage. Spring spikes mature into dark seed clusters.

## General Maintenance Level: Low

Provide moisture and room for colony growth.

In natural settings, old straw-colored leaves can remain; garden foliage can be cut back in early spring before new growth.

**Problems:** Reviewed sources report no serious pest or disease problems. Aggressive rhizome spread can be difficult to control in small gardens.

**Condition Comments:** Rhizomes can spread aggressively and form large colonies. Short drought tolerance does not make this a dry-shade plant; keep garden sites moist.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Carex vulpinoidea*

**Fox sedge / Brown fox sedge**





*Images: Jay Sturner from USA · CC BY 2.0 [license] (resized); Gilles Ayotte / Université Laval · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 1 - 3 ft | **Spread:** 1 - 3 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Birds, Butterflies | **Tolerates:** Deer, Heavy Clay, Wet Soil, Disturbed Sites

**Native Habitats:** Wet meadows, prairies, marshes, swamps, riparian edges, roadside ditches and other open moist or disturbed places.

**Soil Description:** Moist or wet clay and loam, including poorly drained soils; plants occur on both acid and alkaline sites.

## Recommended Uses:

Moist meadow masses, pond or stream margins, rain gardens, bioswales and wetland restoration plantings.

## Additional Benefits:

Dense growth supplies wildlife cover; seeds and foliage support wetland food webs, and skipper butterflies use it as a larval host.

## Culture:

Clumps of narrow grass-like leaves bear short, crowded spikes resembling a fox tail. Foliage yellows after frost, and plants can quickly colonize suitable moist ground.

## General Maintenance Level: Low

Manage spread where space is limited.

Old foliage may be cut to the ground in late winter in garden plantings.

**Problems:** Can become weedy and spread rapidly by seed. Provide room or manage unwanted spread in small gardens.

**Condition Comments:** Allow room for rapid spread and seedlings. Moist or wet sites are preferred even though established plants can tolerate some drier conditions.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Chasmanthium latifolium*

**Northern sea oats / Inland sea oats / River oats**





*Images: Katja Schultz · CC BY 2.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green | **Height:** 2 - 5 ft | **Spread:** 1 - 2.5 ft | **Bloom Time:** Aug, Sep | **Sun:** Full Sun, Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Small Mammals, Butterflies | **Tolerates:** Shade, Black Walnut, Deer, Occasional Wet Soil, Erosion

**Native Habitats:** Rich woods, stream banks, moist bluffs and rocky wooded slopes near water.

**Soil Description:** Moist, fertile, well-drained loam, sand or clay; tolerates poorer soil but performs best with dependable moisture.

## Recommended Uses:

Woodland and shade gardens, naturalized masses, stream margins, moist borders and dried arrangements.

## Additional Benefits:

Moving seedheads, autumn foliage and winter structure add interest; seeds feed wildlife and foliage supports butterfly larvae.

## Culture:

Upright, clump-forming grass with broad bamboo-like leaves and flattened, nodding spikelets. Green heads mature to tan or purplish bronze; leaves become coppery after frost.

## General Maintenance Level: Medium

Manage unwanted seedlings and expanding clumps.

Leave foliage through winter for interest, then cut back in early spring; staking may be needed in some sites.

**Problems:** Self-seeds freely and may spread aggressively by rhizomes. Some plants need support; reviewed sources report no serious insect or disease problems.

**Condition Comments:** Choose a location where seedlings and rhizome spread can be managed. Leaves and hanging heads provide autumn and winter interest after flowering.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Deschampsia cespitosa*

**Tufted Hairgrass / Tussock Grass**





*Images: Krzysztof Ziarnek, Kenraiz · CC BY-SA 4.0 [license] (resized); Matt Lavin · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Green, Purple, Gold | **Height:** 2 - 4 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Part Shade, Full Sun | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Songbirds | **Tolerates:** Black Walnut, Salt, Pollution, Deer

**Native Habitats:** Cool, damp meadows, sandy or rocky shores, bogs, fens, seeps and stream margins; also disturbed wet fields.

**Soil Description:** Moist, humus-rich soil; tolerates a range of soil textures and alkaline conditions. Seasonal flooding is tolerated, permanent inundation is not.

## Recommended Uses:

Woodland and shade gardens, moist meadows, naturalized plantings, water-garden margins and groups among shade-tolerant perennials.

## Additional Benefits:

Fine-textured foliage and airy flower panicles; straw-colored seedheads provide winter interest and can be used in arrangements.

## Culture:

Cool-season bunchgrass with dense tussocks of fine foliage. Semi-evergreen leaves and airy panicles provide a long seasonal display. May self-seed.

## General Maintenance Level: Low

Cut old foliage back in late winter before new growth.

Leave seedheads for winter interest, or deadhead in autumn if self-seeding is unwanted.

**Problems:** Dense shade reduces flowering. Avoid year-round flooding. Self-seeding may need control in managed gardens.

**Condition Comments:** Light to moderate shade is preferred. Dense shade reduces flowering; full sun can reduce foliage quality. Flowering dates vary by location, and the straw-colored seedheads can persist into winter.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Elymus virginicus*

**Virginia wildrye / Eastern wildrye**






*Images: Daderot · CC0 1.0 [license] (resized); Matt Lavin · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Greenish | **Height:** 2 - 4 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Jun, Jul, Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Small Mammals, Butterflies, Moths | **Tolerates:** Erosion, Heavy Clay, Some Deer Browsing

**Native Habitats:** Bottomland forests, moist prairies, rocky glades, bluffs, savannas, marsh edges, stream banks, fields and disturbed ground in North America.

**Soil Description:** Moist, relatively fertile, well-drained loam or clay; adaptable to other soil textures if adequate moisture is available.

## Recommended Uses:

Naturalized meadow and woodland-edge groups, moist slopes, stream banks, rain gardens and wildlife plantings.

## Additional Benefits:

Seeds feed birds and small rodents, foliage hosts butterfly and moth larvae, and clumps provide shelter and seasonal texture.

## Culture:

Cool-season bunchgrass with arching green to blue-green leaves. Upright, bristly, wheat-like spikes rise above the foliage and mature from green to buff or golden brown.

## General Maintenance Level: Low

Manage self-seeding where needed.

Old foliage and stalks may be cut back in late winter; retain heads where wildlife food and naturalization are desired.

**Problems:** Usually few serious insect or disease problems, but seedlings can become abundant. Mature bristly heads may injure grazing animals; ergot-contaminated heads are toxic to livestock.

**Condition Comments:** Foliage is lower than the flowering stems. Freely self-seeds; remove heads before seed ripens where seedlings are unwanted.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Eragrostis spectabilis*

**Purple lovegrass / Purple love grass**





*Images: David J. Stang · CC BY-SA 4.0 [license] (resized); Matt Lavin · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Reddish purple | **Height:** 1 - 2 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Birds, Butterflies | **Tolerates:** Drought, Poor Soil, Heat, Black Walnut, Urban Conditions, Roadside Salt, Deer

**Native Habitats:** Dry sandy prairies, savannas, flatwoods, sandhills, glades, open woods, fields and sandy or gravelly roadsides in North America.

**Soil Description:** Well-drained, dry sandy or gravelly soil; low fertility is suitable.

## Recommended Uses:

Sunny mass plantings, meadows, dry borders, rock gardens, dried arrangements and lightly used lawn alternatives.

## Additional Benefits:

Airy summer color and reddish autumn foliage add texture; seed feeds birds and foliage supports Zabulon skipper larvae.

## Culture:

Warm-season bunchgrass with short rhizomes and arching basal leaves. Airy reddish-purple panicles rise over the foliage, fade buff and may detach and tumble as seed matures.

## General Maintenance Level: Low

Cut old foliage back in early spring if needed.

Deadhead after flowering where seedlings are unwanted; allow some seed where natural renewal is desired.

**Problems:** Aphids, leaf spots and spittlebugs are occasional problems. Seedlings and slowly expanding clumps may need management in small plantings.

**Condition Comments:** Often a relatively short-lived perennial that renews by seed. It tolerates light foot traffic when used as a lawn alternative, but not heavy traffic.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Juncus effusus*

**Soft rush / Common rush**





*Images: Ole Husby · CC BY-SA 2.0 [license] (resized); Forest and Kim Starr · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellowish green, Aging brown | **Height:** 2 - 4 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Birds | **Tolerates:** Wet Soil, Shallow Standing Water, Erosion, Low Salt Exposure, Moderate Deer Resistance

**Native Habitats:** Freshwater marshes, wet meadows, seeps, swales, open wet woods, pond and river margins and disturbed wet ditches. The broad species includes regional subspecies.

**Soil Description:** Saturated, often acidic mucky soil preferred; moist sandy, silty, gravelly or clay soils can be suitable if they do not dry out.

## Recommended Uses:

Pond and water-garden edges, wet meadow masses, rain gardens, bioswales and wet-site containers.

## Additional Benefits:

Upright green stems add vertical texture and wetland clumps provide cover and nesting sites for birds and other wildlife.

## Culture:

Clump-forming perennial rush with smooth, upright, cylindrical, unjointed green stems and reduced basal leaf sheaths. Small branched flower clusters appear near the stem sides and develop brown capsules.

## General Maintenance Level: Low

Maintain dependable moisture and manage unwanted spread.

Cut old stems back in early spring where needed; divide clumps or use containers where confinement is important.

**Problems:** Rust, leaf spots and stem rots may occur. Rhizomes and seedlings can spread readily; prolonged dry weather may require supplemental moisture.

**Condition Comments:** Can spread by short rhizomes and abundant seed. Choose a wet site and allow room, or use containers to limit expansion. Evergreen behavior varies with winter climate.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Panicum virgatum*

**Switchgrass**





*Images: Andrey Zharkikh · CC BY 4.0 [license] (resized); Andrey Zhakikh · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink-tinged, Purple | **Height:** 3 - 6 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jun, Jul, Aug, Sep, Oct | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Birds, Small Mammals, Butterflies | **Tolerates:** Deer, Drought, Erosion, Clay Soil, Dry Soil, Wet Soil, Black Walnut, Urban Conditions, Moderate Salt, Occasional Flooding

**Native Habitats:** Wet and dry prairies, open woods, stream banks, gravel bars and moist roadsides across much of North America.

**Soil Description:** Adaptable sandy or clay soils with average to moist conditions; avoid excessive fertility or poor placement that encourages floppy growth.

## Recommended Uses:

Native meadows, prairie groups, perennial-border backgrounds, screens and suitable rain-garden or pond-margin plantings.

## Additional Benefits:

Fall color, persistent winter structure and seed provide ornamental and wildlife value; clumps offer cover and nesting material.

## Culture:

Warm-season clumping grass with upright leafy stems and airy branched flower panicles. Foliage is often blue-green, then yellow-orange and tan in autumn and winter. Seedheads can persist after flowering.

## General Maintenance Level: Low

Cut back clumps in late winter or early spring before new growth.

Manage unwanted seedlings in small gardens; avoid excessive fertilizer.

**Problems:** Rust, crown or root rot, thrips, mites and Japanese beetles may occur. Excess shade or fertility can cause flopping; seedlings or rhizomes may spread. Dry standing grass is flammable.

**Condition Comments:** Too much shade or fertilizer can weaken stems and cause flopping. Allow seedheads to remain for winter food and structure where practical.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Schizachyrium scoparium*

**Little bluestem / Prairie beardgrass**





*Images: Montrealais · CC BY-SA 3.0 [license] (resized); Kathleen Moore · CC0 [license] (resized)*

## Characteristics:

**Bloom Color:** Purplish bronze | **Height:** 2 - 4 ft | **Spread:** 1.5 - 2 ft | **Bloom Time:** Jun, Jul, Aug, Sep, Oct | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Small Mammals, Butterflies | **Tolerates:** Deer, Drought, Erosion, Clay Soil, Dry Soil, Shallow Rocky Soil, Black Walnut, Heat, Humidity, Urban Conditions

**Native Habitats:** North American prairies, meadows, open woods, rocky slopes, savannas and other well-drained openings.

**Soil Description:** Average to poor, dry-to-medium, well-drained soil; clay or rocky soils are suitable if drainage is adequate.

## Recommended Uses:

Sunny native meadows, prairie groups, dry slopes and well-drained borders or rain-garden margins.

## Additional Benefits:

Fall and winter structure, seed food, cover and larval-host foliage support wildlife and add seasonal texture.

## Culture:

Warm-season bunchgrass with narrow blue-green leaves, purplish-bronze flowering stems and fluffy mature seedheads. Copper-orange foliage and standing stems can persist through winter.

## General Maintenance Level: Low

Cut back in late winter or early spring before new growth.

Retain winter stems and seedheads where practical, and manage unwanted seedlings.

**Problems:** Clumps may flop in shade or overly rich conditions. Poor drainage is unsuitable, and self-sown seedlings may need control.

**Condition Comments:** Full sun and modest fertility help maintain upright clumps. Avoid persistent wetness and keep mulch away from the crown.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Sorghastrum nutans*

**Indiangrass / Yellow Indiangrass**





*Images: Joshua Mayer from Madison, WI, USA · CC BY-SA 2.0 [license] (resized); Joshua Mayer · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Light brown, Yellow stamens | **Height:** 3 - 5 ft | **Spread:** 1 - 2 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Birds, Small Mammals, Grasshoppers, Butterflies | **Tolerates:** Deer, Drought, Erosion, Clay Soil, Dry Soil, Shallow Rocky Soil, Black Walnut, Urban Conditions

**Native Habitats:** North American tallgrass prairies, open woods, fields and dry slopes.

**Soil Description:** Average to poor, dry-to-medium, well-drained soils, including heavy clay where drainage is suitable.

## Recommended Uses:

Prairie and meadow groups, sunny native plantings, border accents and suitable slopes where tall seasonal growth fits.

## Additional Benefits:

Vertical fall and winter structure, cover, nesting material and seed provide ornamental and wildlife value.

## Culture:

Warm-season bunchgrass with green-to-blue-gray leaves and tall branched panicles bearing yellow stamens. Heads darken to bronze or chestnut as seed matures, then fade while standing into winter.

## General Maintenance Level: Medium

Cut back in late winter or early spring before new growth.

Manage unwanted seedlings and support tall growth if site conditions cause flopping.

**Problems:** Plants may flop in rich or overly moist conditions and can self-sow. No major pest or disease problem is reported in reviewed sources.

**Condition Comments:** Clumps remain relatively low early in the season, then send tall flowering stems above foliage. Avoid excessive fertility and moisture that encourage flopping.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN] [PNL]*

# *Sporobolus heterolepis*

**Prairie dropseed**





*Images: Joshua Mayer · CC BY-SA 2.0 [license] (resized); Andrey Zharkikh · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Brown | **Height:** 2 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Aug, Sep, Oct | **Sun:** Full Sun | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds | **Tolerates:** Deer, Drought, Erosion, Clay Soil, Dry Soil, Shallow Rocky Soil, Black Walnut, Urban Conditions

**Native Habitats:** Central and western North American prairies, glades, open ground and railway margins.

**Soil Description:** Dry-to-medium, well-drained sandy, rocky, clay or average soil.

## Recommended Uses:

Sunny meadows, dry slopes, rock gardens, border accents and the well-drained upper edge of rain gardens.

## Additional Benefits:

Fine texture, fragrant panicles and winter structure add seasonal interest; seeds feed birds and stems provide nesting structure for native bees.

## Culture:

Fine-leaved, warm-season bunchgrass with arching foliage and airy, fragrant late-summer panicles. Orange-gold fall foliage fades to copper or bronze; winter stems can persist.

## General Maintenance Level: Low

Cut back old foliage in spring before new growth.

Allow established clumps to mature; seed germination and division can be slow or difficult.

**Problems:** No serious pest or disease problems are reported by the selected sources. Slow establishment can limit early coverage.

**Condition Comments:** Slow to establish and slow growing; allow time for the clump to mature. Avoid persistently wet ground.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [NMN]*

# Shrubs

# *Andromeda polifolia*

**Bog rosemary**





*Images: H. Zell · CC BY-SA 3.0 [license] (resized); Denali National Park and Preserve · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, White | **Height:** 0.67 - 3 ft | **Spread:** 2 - 3 ft | **Bloom Time:** Jun, Jul | **Sun:** Full Sun, Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 2a - 6b

**Attracts:** Bees, Flies, Butterflies | **Tolerates:** Wet Soil

**Native Habitats:** Acid bogs in its circumpolar northern range.

**Soil Description:** Strongly acidic, humus-rich, moisture-retentive soil; peat, sand and organic bog substrates are described.

## Recommended Uses:

Moist acidic border fronts, bog gardens and suitable pond or stream margins.

## Additional Benefits:

Evergreen blue-green foliage and clusters of delicate pink or white flowers provide ornamental interest.

## Culture:

Low evergreen shrub, about 8 inches to 3 ft tall, with narrow blue-green leaves, rolled leaf margins and nodding urn-shaped flowers.

## General Maintenance Level: Low

Maintain suitable moisture and acidic soil.

Allow room for slow suckering and eventual patches.

**Problems:** NC State and Wildflower report no serious pest or disease issues. Heat, humidity and unsuitable soil acidity can cause poor performance; ingestion is toxic.

**Condition Comments:** Keep roots moist and soil strongly acidic. Heat and humidity can limit performance. This is a poisonous heath shrub, not culinary rosemary.

*Botanical references: [MBG] [WF]*

# *Aronia arbutifolia*

**Red chokeberry**





*Images: Cabarrusco Hope Duckworth · CC BY 4.0 [license] (resized); DouglasGoldman · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Light pink | **Height:** 6 - 10 ft | **Spread:** 3 - 6 ft | **Bloom Time:** May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Butterflies, Bees, Small Mammals, Pollinators | **Tolerates:** Wet Soil, Occasional Flooding, Clay Soil, Erosion

**Native Habitats:** Wet and dry thickets, pine bottomlands, swamps and open bogs of eastern North America.

**Soil Description:** Average, moderately moist soil with broad texture tolerance, including boggy sites; moist, richer soil is preferred.

## Recommended Uses:

Native shrub masses, borders, open woodland edges and suitable pond or stream margins.

## Additional Benefits:

White-pink spring flowers, red autumn foliage and bright red fruit persisting into winter provide multi-season interest.

## Culture:

Multi-stemmed deciduous shrub with upright, vase-shaped growth, finely toothed leaves and red fruit; roots can produce colonies.

## General Maintenance Level: Low

Remove unwanted root suckers to limit colonies.

Allow natural spread in larger plantings; monitor leaves and twigs for disease.

**Problems:** Leaf spots and twig or fruit blight can occur; NC State also notes apple borers. Deer may browse plants, and suckering can be unwanted.

**Condition Comments:** Full sun gives the best flower and fruit display. Remove suckers if a contained shrub is desired; plants can become leggy with age. Bloom timing varies by region.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN*]*

# *Aronia melanocarpa*

**Black chokeberry**





*Images: Linda N. · CC BY 2.0 [license] (resized); Randy Harter · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 6 ft | **Spread:** 3 - 6 ft | **Bloom Time:** May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Birds | **Tolerates:** Wet Soil, Flooding, Some Drought

**Native Habitats:** Low woods, swamps, bogs and moist thickets, occasionally drier uplands, in eastern North America.

**Soil Description:** Moist, acidic, well-drained soil is preferred; adaptable to a broad range of soils, including boggy sites.

## Recommended Uses:

Native shrub borders, open woodland edges, naturalized colonies and suitable pond or stream margins.

## Additional Benefits:

Spring flowers, dark autumn fruit and red-purple fall foliage provide seasonal interest and bird food.

## Culture:

Open, upright to rounded deciduous shrub with finely toothed glossy leaves, white flower clusters and blackish-purple fruit.

## General Maintenance Level: Low

Remove root suckers if colonial spread is unwanted.

Allow spreading growth in naturalized areas and monitor occasional leaf or twig disease.

**Problems:** Sources report no serious pest or disease problems, but leaf spots and twig or fruit blight may occur. Suckering and legginess can require management.

**Condition Comments:** Suckers readily and may form colonies. Full sun generally gives better fruit production; allow space for mature spread.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN*]*

# *Cephalanthus occidentalis*

**Buttonbush**





*Images: Al Riordan · CC BY 4.0 [license] (resized); BotBin · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 5 - 12 ft | **Spread:** 4 - 8 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds, Songbirds, Waterfowl | **Tolerates:** Wet Soil, Seasonal Flooding, Erosion, Heat, Soil Compaction, Moderate Deer Resistance

**Native Habitats:** Swamps, marshes, low woods, wet thickets, floodplains, ponds, lakeshores and stream or river margins.

**Soil Description:** Rich, moist or wet soil with organic matter; adapts to several soil textures, including poorly drained sites, but not dry soil.

## Recommended Uses:

Rain and water gardens, pond edges, wet low spots, native shrub borders and pollinator plantings.

## Additional Benefits:

Summer flowers provide nectar, and persistent seedheads provide winter interest and food for songbirds and waterfowl.

## Culture:

Multi-stemmed deciduous shrub with glossy opposite or whorled leaves. Fragrant spherical flower heads have long projecting styles; brown fruiting balls can persist into winter.

## General Maintenance Level: Low

Little pruning is normally needed.

Shape in early spring if desired; an overgrown shrub can be rejuvenated by an early-spring cutback.

**Problems:** Reviewed sources report no significant insect or disease problems. Foliage is poisonous if eaten; avoid ingestion. Dry sites are unsuitable.

**Condition Comments:** Flowering is reduced in shade or dry soil. Usually a shrub, but exceptional plants can approach small-tree size.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Clethra alnifolia*

**Summersweet / Sweet pepperbush**



*Images: Susan Strine · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 8 ft | **Spread:** 4 - 6 ft | **Bloom Time:** Jul, Aug | **Sun:** Full Sun, Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Butterflies, Bees, Hummingbirds, Small Mammals | **Tolerates:** Heavy Shade, Heavy Clay, Wet Soil, Erosion, Salt Spray, Deer

**Native Habitats:** Swampy woods, wet marshes, stream banks, damp thickets, sandy coastal woods and seashores in eastern North America.

**Soil Description:** Consistently moist, acidic soil with organic matter; sandy soils are preferred, but moist clay can be suitable.

## Recommended Uses:

Moist woodland and shade gardens, native shrub borders, hedges, grouped plantings, pond margins and fragrant plantings near patios.

## Additional Benefits:

Fragrant summer flowers bloom in shade and support pollinators; autumn foliage and persistent capsules extend seasonal interest and provide wildlife food.

## Culture:

Rounded, densely branched deciduous shrub with glossy, toothed leaves and fragrant upright white flower spikes. Brown seed capsules persist after flowering; autumn leaves can turn yellow to golden brown.

## General Maintenance Level: Low

Maintain soil moisture and manage suckers if needed.

Prune in late winter or early spring when shaping is desired; flowers are produced on the new season’s growth.

**Problems:** Spider mites can become a concern in dry conditions. Avoid soil drying and manage unwanted suckering; reviewed sources otherwise report few serious pest or disease problems.

**Condition Comments:** Avoid hot, dry sites. Plants sucker and can form small thickets in favorable conditions; leave room or remove unwanted suckers.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Cornus amomum*

**Silky dogwood**





*Images: User:SB_Johnny · CC BY-SA 3.0 [license] (resized); Michael Wolf · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 6 - 12 ft | **Spread:** 6 - 12 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade, Full Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 8b

**Attracts:** Birds, Butterflies, Bees, Small Mammals | **Tolerates:** Wet Soil, Erosion, Black Walnut, Shade

**Native Habitats:** Swamp borders, moist lowlands, floodplains, shrub wetlands, damp thickets and stream or pond margins in eastern North America.

**Soil Description:** Moist, organically rich, slightly acidic soil; several soil textures are suitable, including wet lowland sites.

## Recommended Uses:

Moist woodland and naturalized plantings, stream or pond margins, wildlife hedges and wet-site shrub groups.

## Additional Benefits:

Blue fruits feed birds and other wildlife; flowers supply nectar and pollen, and dense branching offers cover and nesting sites.

## Culture:

Open, rounded, multi-stemmed shrub with silky hairs on young twigs and leaf undersides. Flat clusters of small creamy-white flowers are followed by blue drupes in late summer.

## General Maintenance Level: Medium

Manage spread where a thicket is not desired.

Retain soil moisture and mulch the root zone; remove unwanted rooted branches or growth as needed.

**Problems:** Scale, borers and leaf miners can occur. Leaf spots, cankers, blights, root rot and mildew are possible; thicket growth may need management.

**Condition Comments:** Keep roots cool and moist in summer. Low branches can root where they touch soil and gradually form a thicket; deer may browse leaves.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Cornus racemosa*

**Gray dogwood / Grey dogwood**





*Images: Cranbrook Science · CC BY 2.0 [license] (resized); Frank Mayfield · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 10 - 15 ft | **Spread:** 10 - 15 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 8b

**Attracts:** Birds, Butterflies, Bees, Small Mammals | **Tolerates:** Some Dry Soil, Wet Soil, Poor Soil, Urban Conditions, Heavy Shade

**Native Habitats:** Woodland and prairie margins, wet meadows, thickets, moist or rocky stream and pond edges, roadsides and rocky bluffs.

**Soil Description:** Moist, well-drained soil preferred; adaptable to clay, loam, sand, rocky ground and poorer soils.

## Recommended Uses:

Naturalized groups, wildlife thickets, native shrub borders, screens and stream or pond margins where spread is acceptable.

## Additional Benefits:

Flowers feed insects, fruits feed birds and mammals, and thickets provide nesting and cover. White fruits contrast with red stalks into autumn.

## Culture:

Rhizomatous deciduous shrub with gray-green leaves. Clusters of creamy-white flowers develop into white drupes on red stalks; purple-red autumn foliage and persistent red stalks add interest.

## General Maintenance Level: Low

Manage suckers where spread is unwanted.

Allow natural thicket development in wildlife areas; prune or thin only as needed for space.

**Problems:** Can spread rapidly and become weedy. Dogwood bud gall may occur but is usually minor; reviewed sources otherwise report few serious insect or disease problems.

**Condition Comments:** Spreads by suckers and can form broad thickets. Allow room in naturalized settings or remove unwanted suckers; deer and rabbits may browse leaves and stems.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Cornus sericea*

## Red-twig dogwood / Red-osier dogwood





*Images: John Rusk · CC BY 2.0 [license] (resized); Matt Lavin · CC BY-SA 2.0 [license] (resized)*

### Characteristics:

**Bloom Color:** White | **Height:** 6 - 9 ft | **Spread:** 7 - 10 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (Atlantic and Gulf Coastal Plain; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Birds, Butterflies, Bees, Small Mammals | **Tolerates:** Wet Soil, Seasonal Flooding, Heavy Clay, Erosion

**Native Habitats:** Damp woods, riparian ground, boggy areas, lake shores and wetland margins across much of North America.

**Soil Description:** Fertile, organically rich, consistently moist soil; adaptable to heavy clay and swampy or boggy sites.

### Recommended Uses:

Moist naturalized masses, wildlife shrub borders, winter-interest groups, screens and stream or pond margins.

### Additional Benefits:

Red winter stems, seasonal foliage and fruit provide interest. Fruits feed wildlife, and dense shrubs supply cover and nesting sites.

### Culture:

Upright-spreading deciduous shrub with opposite leaves, white flower clusters and white to bluish-white drupes. Young stems are bright red in winter; rhizomes and suckers form colonies.

### General Maintenance Level: Medium

Manage unwanted suckers and renew old stems if brighter winter color is desired.

Optional early-spring pruning encourages colorful young stems but can reduce flowers; allow natural growth where winter stem display is less important.

**Problems:** Leaf and twig blights, cankers and leaf spots can occur. Scale, leaf miners and bagworms are possible; hot, humid sites and vigorous suckering require attention.

**Condition Comments:** Allow room for suckering colonies. Hot, humid summers can stress plants and increase disease risk; deer may browse stems and foliage. AGCP FACW uses NWPL's Cornus alba/red-osier concept, explicitly mapped through Cornus stolonifera and Swida sericea.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Eubotrys racemosa*

**Swamp doghobble / Sweetbells leucothoe**




*Images: Fritzflohrreynolds · CC BY-SA 3.0 [license] (resized); Famartin · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 8 ft | **Spread:** 2 - 4 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Bees, Butterflies | **Tolerates:** Erosion, Deer

**Native Habitats:** Damp woods, stream banks, pond margins and swamps along the eastern North American coastal region.

**Soil Description:** Moist, cool, acidic soil with suitable drainage; humus-rich woodland soils are appropriate.

## Recommended Uses:

Moist woodland groups, pond margins, rain gardens, slopes, shrub borders and underplantings in suitable acidic soil.

## Additional Benefits:

Fragrant white flower racemes feed visiting insects; autumn foliage and colony structure add ornamental and habitat interest.

## Culture:

Usually deciduous, twiggy shrub with alternate serrated leaves and shiny green/red stems. White bell-to-urn flowers occur in racemes; leaves can turn red, orange or yellow in autumn. Suckers form colonies.

## General Maintenance Level: Low

Maintain moisture and manage unwanted suckers.

Use protective winter mulch in colder sites and avoid exposed, drying positions.

**Problems:** Root rot and leaf spots can develop. Drought, drying wind and exposed cold sites reduce performance.

**Condition Comments:** Avoid drying wind and drought. Protect plants in colder parts of the range, and allow room for suckers to form colonies.

*Botanical references: [MBG] [WF]*

# *Hamamelis virginiana*

**American witch-hazel / Common witch-hazel**





*Images: skdavidson · CC BY-SA 2.0 [license] (resized); Famartin · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 15 - 20 ft | **Spread:** 15 - 20 ft | **Bloom Time:** Oct, Nov, Dec | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Birds, Small Mammals, Moths | **Tolerates:** Heavy Clay, Erosion, Some Deer Browsing

**Native Habitats:** Eastern North American woodlands, forest margins, wooded slopes and stream banks.

**Soil Description:** Moist, acidic, humus-rich, well-drained soil; heavy clay is tolerated.

## Recommended Uses:

Woodland margins, shrub borders, tall screens, informal hedges and specimen small trees where mature space allows.

## Additional Benefits:

Autumn flowers extend the garden season, foliage turns yellow, and seeds feed birds and small mammals; moths use flowers and foliage.

## Culture:

Deciduous shrub or small tree with spreading branches and rounded, uneven-based leaves. Fragrant autumn flowers have four narrow, crinkled yellow petals; woody capsules and yellow fall foliage add interest.

## General Maintenance Level: Low

Little pruning is usually needed.

Remove unwanted suckers and shape in early spring if necessary; allow for flowering on older wood.

**Problems:** Leaf-chewing caterpillars and beetles, gall aphids, scale, leafrollers and leaf miners can occur. Powdery mildew and leaf spots are possible, though problems are usually minor.

**Condition Comments:** Usually a large shrub but can become a small tree. Avoid very dry sites; remove unwanted suckers where colonial spread is not desired.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Hydrangea quercifolia*

**Oakleaf hydrangea**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Cathy Dewitt · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Aging pink | **Height:** 6 - 8 ft | **Spread:** 6 - 8 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** Unknown | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Butterflies, Birds | **Tolerates:** Some Drought, Some Dry Soil

**Native Habitats:** Moist woods, ravines, bluffs and stream banks of the southeastern United States.

**Soil Description:** Organically rich, medium-moisture, well-drained soil; mulch can help retain summer moisture.

## Recommended Uses:

Woodland-edge groups, shrub borders, foundation accents, informal hedges and specimens with space for mature width.

## Additional Benefits:

White-to-pink flower panicles, autumn foliage and exfoliating bark extend seasonal interest; flowers and seeds support some wildlife.

## Culture:

Upright, multi-stemmed deciduous shrub with large oak-like lobed leaves. Pyramidal panicles contain small fertile flowers and larger showy sterile florets; older stems develop peeling bark and foliage colors in autumn.

## General Maintenance Level: Low

Usually needs little pruning.

Prune immediately after flowering if shaping is necessary; remove winter-damaged stems in early spring and maintain summer mulch.

**Problems:** Leaf blight and powdery mildew can occur; aphids and spider mites are occasional pests. Severe winter cold can damage flower buds. Plant parts may cause illness if eaten; avoid ingestion.

**Condition Comments:** Protect young plants and flower buds from severe winter exposure in colder zones. Flowers form on old wood; repeated cutting to the ground can sacrifice bloom.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Ilex glabra*

**Inkberry / Gallberry**





*Images: scott.zona · CC BY 2.0 [license] (resized); SB Johnny · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Greenish white | **Height:** 5 - 8 ft | **Spread:** 5 - 8 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 9

**Attracts:** Birds, Small Mammals, Bees, Butterflies | **Tolerates:** Wet Soil, Erosion, Rabbits, Urban Pollution, Moderate Salt Exposure

**Native Habitats:** Acidic sandy or peaty coastal-plain woods, bog margins, swamp edges and other moist low ground in eastern North America.

**Soil Description:** Rich, consistently moist, acidic soil; adaptable to sandy and heavier soils with suitable drainage.

## Recommended Uses:

Moist woodland groups, native hedges, shrub borders, foundation plantings and rain-garden margins with acidic soil.

## Additional Benefits:

Evergreen foliage provides winter cover; flowers supply nectar and fruit supplies wildlife food.

## Culture:

Slow-growing evergreen shrub with glossy, mostly spineless leaves that are toothed toward the tip. Separate male and female plants bear small spring flowers; female plants produce dark berry-like drupes after pollination.

## General Maintenance Level: Low

Minimal pruning for an informal hedge or natural form.

Shape in early spring before new growth if needed; remove unwanted root suckers.

**Problems:** Leaf spots, inkberry leaf miner and spider mites may occur. Alkaline soil can cause chlorosis. Fruits or other plant parts can cause illness if ingested; avoid ingestion.

**Condition Comments:** Fruit forms on female plants only when compatible male plants flower at the same time. Allow room for suckers or remove them where colonies are unwanted.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Ilex verticillata*

**Common winterberry / Winterberry holly**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Rob Routledge, Sault College, Bugwood.org · CC BY 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Greenish white | **Height:** 6 - 12 ft | **Spread:** 6 - 12 ft | **Bloom Time:** Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Small Mammals, Butterflies, Bees | **Tolerates:** Wet Soil, Poor Drainage, Heavy Clay, Erosion, Urban Conditions

**Native Habitats:** Swamps, damp thickets, low woods, wet woodland margins and pond or stream edges in eastern North America.

**Soil Description:** Moist, acidic, organic loam preferred; adaptable to lighter and heavier soils, including boggy or poorly drained ground.

## Recommended Uses:

Moist native shrub groups, rain gardens, pond margins, wildlife hedges, winter-interest borders and cut branches.

## Additional Benefits:

Persistent red fruit adds winter color and feeds birds and mammals; shrubs provide cover and flowers feed insects.

## Culture:

Deciduous, multi-stemmed holly with toothed leaves. Male and female flowers occur on separate plants; fertilized female flowers produce red drupes that can persist on bare stems into winter.

## General Maintenance Level: Low

Usually needs little pruning.

Shape in early spring before new growth if necessary; allow room for suckering clumps and plan compatible flowering partners.

**Problems:** Leaf spots, mildew, holly leaf miners, scale and mites may occur. Neutral or alkaline soils can cause severe chlorosis. Fruits can cause illness if eaten; avoid ingestion.

**Condition Comments:** For fruit, match female plants with a male of the same species that blooms concurrently. Dry soil can reduce fruit set; deer and rabbits may browse foliage.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Itea virginica*

**Virginia sweetspire**





*Images: Cathy DeWitt · CC BY 4.0 [license] (resized); Chris Alberti · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 3 - 5 ft | **Spread:** 3 - 5 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Butterflies, Birds | **Tolerates:** Heavy Shade, Heavy Clay, Wet Soil, Periodic Flooding, Erosion, Moderate Deer Resistance

**Native Habitats:** Moist woods, wooded stream banks, swamps and wet pine barrens in the eastern and southeastern United States.

**Soil Description:** Moist, humus-rich, slightly acidic soil; adaptable to several textures, including clay and low, poorly drained sites.

## Recommended Uses:

Moist shrub borders, woodland edges, rain gardens, stream margins, informal hedges and naturalized masses.

## Additional Benefits:

Fragrant spring flowers feed insects, seeds feed songbirds, and long-lasting autumn foliage adds seasonal color.

## Culture:

Arching, broad-spreading deciduous to semi-evergreen shrub with fragrant drooping white racemes. Persistent capsules follow flowers; leaves can turn red, orange and gold in autumn. Root suckers form colonies.

## General Maintenance Level: Low

Manage suckers where colony spread is unwanted.

Prune after flowering if needed because blooms form on previous-season wood; maintain moisture during drought.

**Problems:** Reviewed sources report few serious pests or diseases. Leaves may become chlorotic in alkaline soil, and suckering can become weedy in confined spaces.

**Condition Comments:** Provide water during extended dry weather if needed. Roots can sucker into dense colonies; more sun generally improves flowers and fall color.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Kalmia latifolia*

**Mountain laurel**



*Images: Randy Harter · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pink | **Height:** 5 - 15 ft | **Spread:** 5 - 15 ft | **Bloom Time:** Jun, Jul | **Sun:** Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Rabbits

**Native Habitats:** Acidic rocky or sandy woods, forest margins, mountain slopes, balds and similar eastern North American uplands.

**Soil Description:** Cool, moist, acidic, humus-rich, well-drained soil. Heavy clay or persistently wet soils are unsuitable.

## Recommended Uses:

Woodland and shrub-border groups, informal hedges and foundation accents in suitable acidic, drained soil.

## Additional Benefits:

Evergreen foliage provides winter structure and cover; showy flower clusters add late-spring interest and support flower visitors.

## Culture:

Broadleaf evergreen shrub with leathery leaves and gnarled stems as it ages. Clusters of five-sided cup-like flowers have anthers held in pockets that release pollen when triggered by visiting insects.

## General Maintenance Level: Medium

Remove spent flower clusters and prune lightly after bloom if needed.

Maintain mulch and suitable soil moisture; avoid disturbing shallow roots.

**Problems:** Leaf spots, blights, borers, scale, whiteflies and lace bugs can occur. Poor drainage is harmful. All plant parts are highly toxic if ingested; avoid ingestion by people or livestock.

**Condition Comments:** Keep the root zone cool with suitable mulch and drainage. Morning sun with afternoon shade is useful in hot climates; deer may browse leaves and twigs.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PRN*]*

# *Lindera benzoin*

**Northern spicebush / Spicebush**





*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Greenish yellow | **Height:** 6 - 12 ft | **Spread:** 6 - 12 ft | **Bloom Time:** Mar, Apr | **Sun:** Full Sun, Part Shade, Full Shade | **Water:** Medium | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 9

**Attracts:** Birds, Butterflies, Pollinators | **Tolerates:** Heavy Shade, Heavy Clay, Wet Soil, Black Walnut

**Native Habitats:** Bottomlands, moist woods, ravines, valleys, wooded slopes, thickets and stream margins in central and eastern North America.

**Soil Description:** Moist, well-drained woodland soil with organic matter; adaptable to suitable clay and other textures.

## Recommended Uses:

Woodland and shade gardens, moist shrub borders, stream or pond margins, native groups and butterfly habitat plantings.

## Additional Benefits:

Early flowers feed insects, foliage supports swallowtail larvae, fruit feeds migrating birds and yellow autumn foliage adds color.

## Culture:

Rounded deciduous shrub with aromatic leaves and twigs. Clusters of small yellow flowers appear on bare branches before leaf-out; pollinated female plants bear red drupes and leaves turn yellow in autumn.

## General Maintenance Level: Low

Maintain moisture and space for a rounded shrub.

Little routine pruning is required; plan male and female plants if fruit is desired.

**Problems:** NC State reports susceptibility to laurel wilt. Deer may browse twigs and leaves; otherwise reviewed sources report few serious insect or disease problems.

**Condition Comments:** Female plants require a male for fruit set. Full sun needs more moisture; heavy shade produces a more open, spreading shrub and less vivid fall color.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Myrica pensylvanica*

**Northern bayberry / Candleberry**





*Images: RockerBOO · CC BY-SA 2.0 [license] (resized); K M · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellowish green | **Height:** 6 - 8 ft | **Spread:** 5 - 10 ft | **Bloom Time:** May | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 7a

**Attracts:** Birds, Small Mammals, Butterflies, Moths | **Tolerates:** Deer, Drought, Erosion, Wet Soil, Poor Soil, Wind, Salt Spray

**Native Habitats:** Eastern North American dunes, woodland borders, thickets and open coastal or inland colonies, from eastern Canada south to North Carolina.

**Soil Description:** Adaptable to sandy, loamy or clay soils; moist acidic peat or sand is preferred, but poor soils and a range of pH conditions are tolerated.

## Recommended Uses:

Grouped shrub borders, informal hedges, screens, coastal plantings and slopes where colonies have room to spread.

## Additional Benefits:

Persistent fruit feeds winter wildlife, aromatic foliage adds interest, and a nitrogen-fixing root association helps it grow in poor soils.

## Culture:

Dense rounded deciduous to semi-evergreen shrub with aromatic leathery leaves and resin glands beneath. Male and female catkins occur on separate plants; pollinated females bear waxy gray-white drupes that may persist into spring.

## General Maintenance Level: Low

Prune only as needed for form and manage unwanted suckers.

Plan pruning around flowering and fruiting wood and retain a pollinating male where berries are desired.

**Problems:** No major pest or disease issue is reported in the reviewed species account. Suckering colonies may need containment; fruit will be absent without a pollinated female.

**Condition Comments:** Female plants need a compatible male nearby for fruit. Allow space for suckering colonies; pruning can remove old growth carrying the next season’s flowers.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Rhododendron viscosum*

**Swamp azalea / Clammy azalea**





*Images: Elvert Barnes · CC BY-SA 2.0 [license] (resized); Elvert Barnes · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pale pink | **Height:** 3 - 5 ft | **Spread:** 3 - 5 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Part Shade | **Water:** Medium, Wet | **AGCP Status:** OBL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Bees, Butterflies, Hummingbirds | **Tolerates:** Rabbits, Wet Soil, Periodic Flooding

**Native Habitats:** Eastern North American swamps, bogs, stream margins and wet lowlands, with some Appalachian higher-elevation populations.

**Soil Description:** Acidic, humus-rich moist soil with enough drainage to keep roots out of persistent standing water.

## Recommended Uses:

Moist native shrub borders, open woodland gardens and shaded pond or stream margins with suitable root-zone drainage.

## Additional Benefits:

Late native-azalea flowers extend spring-to-summer interest, provide fragrance and attract flower visitors; autumn foliage adds color.

## Culture:

Usually deciduous, upright-spreading shrub with leaves clustered near branch ends. Fragrant sticky white-to-pale-pink tubular flowers open after the leaves; fall foliage can turn yellow, orange or purple.

## General Maintenance Level: Medium

Maintain moisture, suitable acidic soil and protective mulch.

Remove spent flower clusters after bloom if practical and manage unwanted root suckers.

**Problems:** Root and crown rots, leaf spots and other azalea diseases can occur, along with aphids, borers, lace bugs, mites and scale. Dry roots, waterlogging and strong sun cause stress. Contains grayanotoxins; avoid ingestion.

**Condition Comments:** Protect shallow roots from drying and disturbance, mulch appropriately and shelter from strong winter wind. Avoid hot afternoon sun and chronically submerged roots.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Rhus aromatica*

**Fragrant sumac / Aromatic sumac**





*Images: Kbh3rd · CC BY 3.0 [license] (resized); Photo by David J. Stang · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Yellow | **Height:** 2 - 6 ft | **Spread:** 6 - 10 ft | **Bloom Time:** Apr | **Sun:** Full Sun, Part Shade | **Water:** Dry, Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 9b

**Attracts:** Birds, Butterflies, Small Mammals | **Tolerates:** Rabbits, Drought, Erosion, Clay Soil, Dry Soil, Shallow Rocky Soil, Black Walnut

**Native Habitats:** Dry rocky woods, thickets, prairies and old fields in North America.

**Soil Description:** Average, dry-to-medium, well-drained soils, including rocky, sandy or clay soils. Avoid poorly drained sites.

## Recommended Uses:

Informal hedges, native shrub groups, naturalized banks and well-drained slopes where colonies can spread.

## Additional Benefits:

Early flowers, autumn color and persistent red fruit add seasonal interest; fruit and dense growth feed or shelter wildlife.

## Culture:

Spreading deciduous shrub with aromatic three-leaflet leaves, small early yellow flowers and hairy red drupes. Fall leaves can turn orange, red or purple; stems and root suckers can form colonies.

## General Maintenance Level: Low

Manage unwanted suckers or rooted stems and prune for space as needed.

Use well-drained sites and allow room for a spreading shrub.

**Problems:** Leaf spots, rust, scale, aphids, mites and mostly cosmetic nipple galls may occur. Poor drainage is unsuitable, and spreading colonies may need control.

**Condition Comments:** Flowers usually precede the leaves. Allow room for rooted stems and suckers; fruit production depends on flower sex and pollination.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Rosa carolina*

**Carolina rose / Pasture rose**





*Images: Malcolm Manners · CC BY 2.0 [license] (resized); Malcolm Manners · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink | **Height:** 3 - 6 ft | **Spread:** 5 - 10 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Bees, Butterflies, Moths, Birds, Small Mammals | **Tolerates:** Heat, Occasionally Dry Soil

**Native Habitats:** Eastern and central North American open woods, prairies, hillsides, fields and roadsides.

**Soil Description:** Moist, well-drained average garden soil; maintain air circulation and avoid stagnant root conditions.

## Recommended Uses:

Native hedges, naturalized borders, meadow edges and wildlife plantings with space for suckering growth.

## Additional Benefits:

Flowers provide pollen for visiting insects; hips and dense branches supply wildlife food and cover in autumn and winter.

## Culture:

Deciduous suckering shrub with prickly stems and pinnate leaves, usually with five to seven toothed leaflets. Fragrant single pink flowers are followed by red hips.

## General Maintenance Level: Medium

Prune as needed in late winter or early spring and manage unwanted suckers.

Remove diseased material and maintain moisture; retain some appropriate hollow stems for nesting bees.

**Problems:** Black spot, powdery mildew, rust, beetles, aphids, thrips and mites may occur. Deer can browse stems and leaves; prickly suckering growth may need management.

**Condition Comments:** Use full sun for best flowering and foliar health, maintain air circulation and avoid overhead watering. Allow room for suckers and protect crowns in cold winter sites.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Sambucus canadensis*

**American elderberry / American elder**





*Images: Fredlyfish4 · CC BY-SA 4.0 [license] (resized); H. Zell · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 5 - 12 ft | **Spread:** 5 - 12 ft | **Bloom Time:** Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 9

**Attracts:** Birds, Small Mammals, Butterflies, Bees | **Tolerates:** Erosion, Clay Soil, Wet Soil, Heat, Soil Compaction

**Native Habitats:** American stream margins, marshes, moist forests, alluvial lowlands, ditches and disturbed open sites.

**Soil Description:** Moist, humus-rich, slightly acidic soil is preferred; tolerates a range of soil textures and moisture conditions.

## Recommended Uses:

Naturalized hedges, native shrub backgrounds, screens and moist stream or pond margins where colony growth is acceptable.

## Additional Benefits:

Flowers, fruit, cover and hollow stems support insects, birds and mammals; large white clusters and dark fruit add seasonal interest.

## Culture:

Deciduous suckering shrub with opposite pinnate leaves and white-pithed stems. Broad clusters of small white flowers are followed by drooping purple-black fruits. Also treated as Sambucus nigra subsp. canadensis.

## General Maintenance Level: High

Remove unwanted suckers and dead or weak stems as needed.

Choose pruning intensity for the intended flowering, fruiting and colony size; retain suitable hollow stems for nesting bees.

**Problems:** Cankers, mildew, leaf spots, borers, mites and aphids may occur. Wind or snow can break brittle stems, and suckers can spread. Avoid ingestion of unripe fruit, leaves, stems or roots; these contain harmful compounds.

**Condition Comments:** Allow room for root suckers and arching stems. Flowers form on second-year wood; hard rejuvenation pruning can change the next flowering and fruiting display.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Spiraea latifolia*

**Broadleaf meadowsweet / White meadowsweet**





*Images: Jill Lee · CC BY-SA 2.0 [license] (resized); Epibase · CC BY 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pale pink | **Height:** 3.28 - 4.92 ft | **Spread:** 3.28 - 4.92 ft | **Bloom Time:** Jun, Jul, Aug, Sep | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 7

**Attracts:** Bees, Wasps, Butterflies, Moths, Birds | **Tolerates:** Deer, Wet Soil

**Native Habitats:** Eastern North American moist slopes, meadows, marshes, stream and lake shores, swamps and wetland margins.

**Soil Description:** Moist to wet-mesic soil; acidic to neutral soil with appropriate drainage is suitable.

## Recommended Uses:

Moist native shrub groups, naturalized hedges, woodland edges and pond or stream margins with room for colonies.

## Additional Benefits:

Long summer flowering supports insects, autumn foliage can turn gold, and persistent fruit structures offer winter interest and seed for birds.

## Culture:

Deciduous thicket-forming shrub with reddish arching stems, alternate coarsely toothed broad leaves and terminal white-to-pale-pink flower panicles. Also treated as Spiraea alba var. latifolia.

## General Maintenance Level: Unknown

Prune current-season-flowering growth as needed and remove spent flowers if desired.

Allow room for suckering colonies.

**Problems:** Suckering colonies may require space management. Reviewed RHS account reports generally low pest pressure but lists honey fungus as a possible disease.

**Condition Comments:** Allow room for suckering colonies. Nursery garden size can be smaller than wild plants, which may exceed six feet in height.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Spiraea tomentosa*

**Steeplebush / Hardhack**



*Images: RockerBOO · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Rose-purple | **Height:** 2 - 4 ft | **Spread:** 3 - 5 ft | **Bloom Time:** Jul, Aug, Sep | **Sun:** Full Sun | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Butterflies, Moths, Birds | **Tolerates:** Deer, Erosion, Wet Soil

**Native Habitats:** Eastern North American wet meadows, wet pastures, boggy areas, marshes, fields and lake margins.

**Soil Description:** Moist-to-wet acidic soil; suitable clay, loam or sand can support growth.

## Recommended Uses:

Moist native shrub groups, pond margins, low hedges and other sunny wet landscape sites.

## Additional Benefits:

Dense summer flower spikes provide color and insect value; branching colonies offer structure and larval-host foliage.

## Culture:

Upright deciduous suckering shrub with alternate toothed leaves, woolly undersides and dense pink-to-rose-purple terminal flower spikes. Woody stems may die back in winter.

## General Maintenance Level: Low

Prune in late winter or early spring if needed; flowers form on new growth.

Remove spent flower spikes as desired and manage unwanted suckers.

**Problems:** Leaf spots, fire blight, mildews, aphids, leaf rollers and scale may occur. Colonies expand by suckers, and dry or overly shaded sites reduce performance.

**Condition Comments:** Use a sunny moist position and allow room for suckers. Light shade is tolerated, but full sun gives best flowering.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Vaccinium corymbosum*

**Highbush blueberry**





*Images: Rob Hille · CC BY-SA 3.0 [license] (resized); Sten · CC BY-SA 3.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White, Pink | **Height:** 6 - 12 ft | **Spread:** 8 - 12 ft | **Bloom Time:** May | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5 - 8

**Attracts:** Bees, Butterflies, Birds, Small Mammals | **Tolerates:** Wet Soil

**Native Habitats:** Eastern North American moist woods, bogs, swamps, low areas and acidic barrens.

**Soil Description:** Acidic, organically rich, consistently moist but well-drained soil; MBG recommends approximately pH 4.8–5.2.

## Recommended Uses:

Acid-soil native gardens, informal hedges, shrub borders and edible landscapes with adequate moisture.

## Additional Benefits:

Flowers support bees and butterflies; ripe fruit supplies food for people, birds and mammals, and autumn foliage adds color.

## Culture:

Upright deciduous shrub with spring urn-shaped white or pink flowers, summer blue fruit and colorful autumn foliage. Cultivar size, ripening season and yield vary.

## General Maintenance Level: Medium

Prune as needed in late winter beginning after establishment.

Maintain acidic soil and moisture; compatible, simultaneously flowering cultivars improve crops. Protect ripening fruit where harvest is desired.

**Problems:** High pH can cause chlorosis. Root rot, mummy berry, blights, leaf diseases and fruit-feeding insects can occur; deer and rabbits browse shoots and birds consume fruit.

**Condition Comments:** Shallow fibrous roots benefit from organic mulch and steady moisture. Alkaline soil causes chlorosis; choose compatible plants with overlapping bloom for better fruit set.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Viburnum acerifolium*

**Mapleleaf viburnum**





*Images: Joshua Mayer · CC BY-SA 2.0 [license] (resized); Katja Schulz · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 3 - 6 ft | **Spread:** 2 - 4 ft | **Bloom Time:** Apr, May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3 - 8

**Attracts:** Bees, Butterflies, Birds, Small Mammals | **Tolerates:** Black Walnut, Drought

**Native Habitats:** Eastern and central North American woodland understories, thickets, bluffs and ravines.

**Soil Description:** Moist, acidic, well-drained woodland loam; established plants tolerate drier rocky soils.

## Recommended Uses:

Woodland naturalization, informal hedges, shrub borders and suitable foundation plantings.

## Additional Benefits:

Flowers feed insects, dark fruit feeds birds and mammals, and colorful foliage adds woodland fall interest.

## Culture:

Small deciduous shrub with opposite three-lobed maple-like leaves, flat flower clusters, dark late-season drupes and often pink to reddish-purple fall foliage.

## General Maintenance Level: Low

Prune only as needed immediately after flowering.

Remove unwanted suckers if a colony is not desired; retain compatible plants for fruit production.

**Problems:** Viburnum leaf beetle may damage foliage, deer may browse, and suckers can spread beyond the desired area.

**Condition Comments:** Suckers can form open colonies. For good fruit set, grow more than one genetically distinct compatible plant.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Viburnum dentatum*

**Arrowwood viburnum / Southern arrowwood**





*Images: Fritz Flohr Reynolds · CC BY-SA 4.0 [license] (resized); R. A. Nonenmacher · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 6 - 10 ft | **Spread:** 6 - 10 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 2 - 8

**Attracts:** Bees, Butterflies, Birds, Small Mammals | **Tolerates:** Clay Soil, Black Walnut, Drought, Occasional Flooding

**Native Habitats:** Eastern North American moist woods, stream banks and wooded slopes.

**Soil Description:** Moist, well-drained loam preferred; adaptable to clay, sand and several other soil textures.

## Recommended Uses:

Native shrub borders, tall hedges, screens and wildlife plantings with room for suckering growth.

## Additional Benefits:

Flowers offer nectar, fruit feeds birds and small mammals, and dense growth provides cover. NC reports a potential Spring Azure host relationship.

## Culture:

Upright, rounded, multi-stemmed deciduous shrub with toothed opposite leaves. White late-spring flower clusters develop into blue-black drupes; fall color is variable.

## General Maintenance Level: Low

Prune as needed after flowering; remove unwanted suckers.

Monitor foliage and twigs for leaf-beetle activity where the pest is present.

**Problems:** Viburnum leaf beetle strongly favors arrowwood and repeated severe defoliation can kill shrubs. Whiteflies, deer browsing and unwanted suckers can also be concerns.

**Condition Comments:** Suckers develop with age. More than one genetically distinct compatible plant is needed for good fruit set.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Viburnum lentago*

**Nannyberry / Nannyberry viburnum**





*Images: Keith Kanoti, Maine Forest Service, USA · CC BY 3.0 [license] (resized); R. A. Nonenmacher · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 14 - 16 ft | **Spread:** 6 - 12 ft | **Bloom Time:** May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 2 - 8

**Attracts:** Butterflies, Birds, Small Mammals | **Tolerates:** Urban Conditions, Deer

**Native Habitats:** Eastern North American low woods, wooded slopes, swamp borders and stream banks.

**Soil Description:** Average, moist, well-drained loam to clay-loam; tolerates some drier sites.

## Recommended Uses:

Large native hedges, screens, woodland naturalization or a trained small landscape tree.

## Additional Benefits:

Fruit feeds birds and other wildlife, flowers attract butterflies, and foliage supports Spring Azure larvae.

## Culture:

Large upright deciduous shrub with glossy, finely toothed pointed leaves. Creamy spring flower clusters precede blue-black autumn drupes; fall color varies.

## General Maintenance Level: Low

Prune immediately after flowering; remove suckers where spread is unwanted.

Flower buds form for the next year during summer, so avoid unnecessary later pruning.

**Problems:** Powdery mildew and leaf spots can occur, especially in shade. Nannyberry is a documented viburnum leaf-beetle host; monitor where the pest occurs. Suckers may need control.

**Condition Comments:** Suckering growth can naturalize into colonies. Can be maintained as a large shrub or trained as a small tree.

*Botanical references: [MBG] [WF]*

# *Viburnum nudum*

**Smooth witherod / Possumhaw viburnum**






*Images: David J. Stang · CC BY-SA 4.0 [license] (resized); David J. Stang · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 5 - 12 ft | **Spread:** 5 - 12 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5 - 9

**Attracts:** Butterflies, Moths, Birds, Small Mammals | **Tolerates:** Wet Soil

**Native Habitats:** Eastern and southeastern U.S. low woods, savannas, swamps and bogs.

**Soil Description:** Acidic, moist-to-wet loam preferred; adaptable to several soil textures and suitable boggy margins.

## Recommended Uses:

Moist native shrub groups, hedges, rain gardens and suitable pond or stream margins.

## Additional Benefits:

Fruit supports birds and small mammals. Flowers and potential butterfly or moth host relationships add wildlife value; glossy leaves and fruit provide seasonal interest.

## Culture:

Rounded, multi-stemmed deciduous shrub with glossy opposite leaves, flat fragrant flower clusters and multicolored ripening drupes. Autumn foliage may turn maroon or red-purple.

## General Maintenance Level: Low

Prune lightly only when necessary.

Pruning after bloom removes some developing fruit; MBG recommends light fall pruning when needed.

**Problems:** Viburnum leaf beetle can seriously damage or kill smooth witherod; Morton Arboretum places this species in its highly susceptible group. Deer may browse shoots and leaves.

**Condition Comments:** For the best fruit display, grow genetically distinct compatible plants with overlapping bloom. Fruit changes from pink through blue to purplish black.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Viburnum trilobum*

**American cranberrybush / Highbush cranberry**





*Images: Ryan Hodnett · CC BY-SA 4.0 [license] (resized); Salicyna · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 8 - 12 ft | **Spread:** 8 - 12 ft | **Bloom Time:** May, Jun, Jul | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACW (Atlantic and Gulf Coastal Plain; 2022 v3.6) | **USDA Hardiness Zone:** 2a - 7b

**Attracts:** Butterflies, Birds, Small Mammals | **Tolerates:** Wet Soil, Alkaline Soil

**Native Habitats:** Northern North American swampy woods, bogs, lake margins, thickets and moist slopes.

**Soil Description:** Consistently moist, well-drained loam; adaptable to several soil textures.

## Recommended Uses:

Northern native shrub borders, woodland margins, informal hedges and moist landscape screens.

## Additional Benefits:

Flowers and fruit support wildlife; persistent drupes and autumn foliage add seasonal interest. Birds often use fruit later after freezing and thawing.

## Culture:

Broad deciduous shrub with opposite three-lobed leaves, white lacecap flower clusters and red mature drupes. Native plants have convex or club-shaped leaf-stalk glands, useful in distinguishing European relatives.

## General Maintenance Level: Low

Prune as needed immediately after flowering.

Monitor for viburnum leaf beetle and preserve space for the broad mature shrub.

**Problems:** American cranberrybush is strongly favored by viburnum leaf beetle; repeated defoliation can kill shrubs. Aphids, crown borer, leaf spot, stem blight and mildew may also occur.

**Condition Comments:** Northern shrub that performs poorly in hot, humid summers. Verify native stock identity; hybrids and European cranberrybush can be confused with it. AGCP FACW follows the NWPL species-level rule for its botanical variety synonym; it is not a separate American taxon rating.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# Trees

# *Amelanchier canadensis*

**Shadblow serviceberry / Canadian serviceberry**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); jeansef · CC BY-SA 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White | **Height:** 15 - 25 ft | **Spread:** 15 - 20 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 3a - 8b

**Attracts:** Birds, Butterflies, Bees, Small Mammals, Pollinators | **Tolerates:** Clay Soil, Some Salt, Moderate Deer Resistance

**Native Habitats:** Eastern North American woodland edges, moist woods, lowlands, swamps, bogs and thickets.

**Soil Description:** Moist, well-drained sandy loam is preferred; adaptable to other soil textures, including some clay.

## Recommended Uses:

Specimen or small groups in woodland, native and pollinator gardens; suitable along stream and pond margins.

## Additional Benefits:

Early flowers, wildlife fruit and red-orange autumn foliage provide several seasons of interest.

## Culture:

Deciduous, often multi-stemmed large shrub or small tree with white flower clusters before leaf-out and finely toothed leaves.

## General Maintenance Level: Medium

Monitor foliage and stems for disease or insect damage.

NC State rates maintenance medium; MBG rates it low. Provide suitable moisture and enough room for mature growth.

**Problems:** Rust, leaf spot, blight and powdery mildew can occur, along with sawflies, leaf miners, borers and scale.

**Condition Comments:** Allow room for a large shrub or small tree. Afternoon shade is useful in warm southern sites; sunnier sites need more moisture. Flowering dates vary by location.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Asimina triloba*

**Pawpaw / Common pawpaw**





*Images: Fritzflohrreynolds · CC BY-SA 3.0 [license] (resized); Plant Image Library · CC BY-SA 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Maroon-purple | **Height:** 15 - 30 ft | **Spread:** 15 - 30 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FAC (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Butterflies, Birds, Small Mammals, Flies, Beetles | **Tolerates:** Occasional Wet Soil, Shade, Black Walnut

**Native Habitats:** Moist bottomland woods, wooded slopes, ravines and stream margins of eastern North America.

**Soil Description:** Deep, fertile, acidic, moisture-retentive soil with good drainage; avoid permanently saturated sites.

## Recommended Uses:

Naturalized native gardens, woodland edges and moist riparian plantings; fruit plantings need suitable light and pollination.

## Additional Benefits:

Large leaves turn yellow in autumn; fruit feeds wildlife and foliage supports Zebra Swallowtail caterpillars.

## Culture:

Deciduous understory tree or large shrub with broad drooping leaves, spring maroon flowers and large fruit. Root suckers can form thickets.

## General Maintenance Level: Low

Maintain moisture and remove unwanted root suckers.

Allow room for colonies; fruit production depends on compatible pollination.

**Problems:** Root suckers may be unwanted. Pawpaw peduncle borers can damage flower stalks; leaf-feeding caterpillars usually cause limited injury. Seeds, leaves and stems should not be eaten.

**Condition Comments:** A genetically different pollen donor is needed for fruit production; several suckers from one clone may not supply it. Full sun favors fruiting. Fruit handling can cause skin irritation.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Betula nigra*

**River birch**





*Images: Kathleen Moore · CC BY 2.0 [license] (resized); Kathleen Moore · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Brown, Green | **Height:** 40 - 70 ft | **Spread:** 40 - 60 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4a - 9b

**Attracts:** Birds, Butterflies, Small Mammals | **Tolerates:** Clay Soil, Wet Soil, Occasional Flooding, Black Walnut, Urban Conditions

**Native Habitats:** Floodplains, swampy bottomlands and river or stream banks in the eastern United States.

**Soil Description:** Moist to wet, acidic, fertile soil; adapts to sandy, loamy or heavy clay soils and some poor drainage.

## Recommended Uses:

Large shade-tree plantings, native landscapes, stream margins and suitable rain gardens or bioswales.

## Additional Benefits:

Peeling bark adds winter interest, leaves turn yellow in fall, and seeds, catkins and foliage support wildlife.

## Culture:

Fast-growing deciduous tree, single- or multi-trunked, with peeling salmon-brown bark and finely toothed diamond-shaped leaves.

## General Maintenance Level: Medium

Maintain root-zone moisture and manage fallen twigs and leaves.

Prune only as needed and avoid spring sap flow; suitable mulch can help keep roots cool.

**Problems:** Aphids, leaf miners, skeletonizers and leaf spots may occur. High-pH soil can cause iron chlorosis. River birch resists bronze birch borer better than many other birches; it is not immune to all pests.

**Condition Comments:** Allow space for a large tree. Keep roots cool and moist; summer drought may cause leaf shedding. Flowering dates vary by region, and twig litter can be substantial.

*Botanical references: [MBG] [WF]*
*NJ nursery information (* cultivar/variety option): [PNL] [PRN*]*

# *Cercis canadensis*

**Eastern redbud / American redbud**





*Images: Dcrjsr · CC BY 3.0 [license] (resized); Hope Duckworth · CC BY 4.0 [license] (resized)*

## Characteristics:

**Bloom Color:** Pink, Light purple | **Height:** 20 - 30 ft | **Spread:** 25 - 35 ft | **Bloom Time:** Mar, Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** UPL (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 4 - 8

**Attracts:** Birds, Bees, Butterflies, Hummingbirds | **Tolerates:** Heavy Clay, Black Walnut, Moderate Deer Resistance

**Native Habitats:** Eastern North American woodlands, wooded slopes, bluffs, stream-bank woods and understory openings.

**Soil Description:** Moist, fertile, well-drained soil; moderately fertile clay or sandy soils are suitable, and the tree is adaptable to pH.

## Recommended Uses:

Spring specimen, woodland understory tree, small groups and pollinator gardens where soil drainage and root space are suitable.

## Additional Benefits:

Early flowers support pollinators, foliage supports butterfly larvae, and the branching form, pods and autumn leaves add seasonal interest.

## Culture:

Small deciduous tree with spreading branches and heart-shaped leaves. Clusters of pea-like flowers open on bare branches and trunks before leaves; flattened pods follow.

## General Maintenance Level: Low

Maintain vigor and remove dead or damaged branches.

Provide suitable moisture, protect roots and use a sheltered position where branch breakage is a concern.

**Problems:** Canker and Verticillium wilt can be serious; leaf spots, blights, mildew and several insect pests may occur. Drought, root disturbance and branch breakage can reduce vigor.

**Condition Comments:** Place young trees in their permanent location early and keep watered during establishment. Avoid root disturbance, wet soils, heat or drought stress and lawn herbicide exposure.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Cornus florida*

**Flowering dogwood**





*Images: Cathy Dewitt · CC BY 4.0 [license] (resized); Kristine Paulus · CC BY 2.0 [license] (resized)*

## Characteristics:

**Bloom Color:** White bracts, Yellow-green flowers | **Height:** 15 - 30 ft | **Spread:** 15 - 30 ft | **Bloom Time:** Apr, May | **Sun:** Full Sun, Part Shade | **Water:** Medium | **AGCP Status:** FACU (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 9b

**Attracts:** Birds, Butterflies, Bees, Small Mammals | **Tolerates:** Well-Drained Clay, Black Walnut

**Native Habitats:** Woodland understories and margins, thickets, bluffs and wooded slopes in eastern North America.

**Soil Description:** Moist, organically rich, well-drained, slightly acidic soil; avoid waterlogging and protect the shallow root zone.

## Recommended Uses:

Woodland gardens, specimen trees, small groups near patios and bird or pollinator gardens with suitable drainage.

## Additional Benefits:

Spring bracts, red fruits and autumn foliage provide seasonal interest. Flowers support insects, and fruits supply wildlife food.

## Culture:

Small, low-branching deciduous tree. Four broad, notched white bracts surround clusters of tiny yellow-green flowers; red drupes and reddish autumn foliage follow.

## General Maintenance Level: Medium

Maintain suitable moisture and protect the root zone.

Monitor for disease or borers and remove damaged growth as needed; routine fertilizer schedules are not assumed.

**Problems:** Dogwood anthracnose can be serious. Powdery mildew, leaf spots, cankers, root rot and blights may occur; stressed trees are vulnerable to borers, with scale and leaf miners also possible.

**Condition Comments:** Use afternoon shade in hot sites and mulch to keep roots cool and moist. Disease pressure and site stress can limit success; avoid damaging shallow roots.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

# *Magnolia virginiana*

**Sweetbay magnolia / Sweetbay**





*Images: Hope Duckworth · CC BY 4.0 [license] (resized); Derek Ramsey · CC BY-SA 2.5 [license] (resized)*

## Characteristics:

**Bloom Color:** Creamy white | **Height:** 10 - 35 ft | **Spread:** 10 - 35 ft | **Bloom Time:** May, Jun | **Sun:** Full Sun, Part Shade | **Water:** Medium, Wet | **AGCP Status:** FACW (AGCP; 2022 v3.6) | **USDA Hardiness Zone:** 5a - 10b

**Attracts:** Birds, Small Mammals, Butterflies | **Tolerates:** Wet Soil, Clay Soil, Urban Conditions, Moderate Salt

**Native Habitats:** Coastal and southeastern North American moist woods, shaded swamps and lowlands, extending north along the Atlantic coast to New York.

**Soil Description:** Acidic, organically rich soil with dependable moisture; tolerates heavy clay and wet or boggy conditions.

## Recommended Uses:

Specimen tree, woodland-edge accent, large shrub border or moist planting near ponds and streams, with room for mature spread.

## Additional Benefits:

Fragrant flowers, silvery leaf undersides and showy red seeds provide seasonal interest; woody growth offers cover and supports wildlife.

## Culture:

Small tree or multi-stemmed shrub with glossy green leaves and silvery undersides. Fragrant cup-shaped white flowers are followed by cone-like fruits that expose bright red seeds. Foliage is more persistent in warmer climates.

## General Maintenance Level: Low

Maintain moisture and allow room for the selected tree or multi-stem shrub form.

Monitor alkaline-soil chlorosis and remove unwanted suckers if a more defined form is desired.

**Problems:** Alkaline soils can cause chlorosis. Scale insects, weevils and leaf spots may occur; winter injury is possible in colder sites. Deer may browse foliage and twigs.

**Condition Comments:** Use a sheltered position near the cold end of its range. Winter injury may occur in zones 5–6, and foliage can be deciduous in colder climates.

*Botanical references: [MBG] [WF]*
*NJ nursery information: [PRN] [PNL]*

## References and photo credits

MBG and Wildflower are botanical information references. NJ nursery links provide plant information and purchasing leads; a link does not confirm current stock. Additional references include technical evidence and separately attributed purchasing leads.

## Botanical information references

**Missouri Botanical Garden:** Amsonia hubrichtii; Amsonia tabernaemontana; Amsonia tabernaemontana 'Montana'; Amsonia tabernaemontana var. salicifolia; Aquilegia canadensis; Arisaema triphyllum; Asclepias incarnata; Asclepias incarnata 'Ice Ballet'; Asclepias syriaca; Asclepias tuberosa; Baptisia australis; Caltha palustris; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eupatorium perfoliatum; Eurybia divaricata; Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Helenium autumnale; Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lilium superbum; Lobelia cardinalis; Lobelia siphilitica; Maianthemum racemosum; Mimulus ringens; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Phlox divaricata; Phlox paniculata; Phlox stolonifera; Physostegia virginiana; Pycnanthemum virginianum; Rudbeckia fulgida; Rudbeckia hirta; Rudbeckia laciniata; Silphium perfoliatum; Solidago nemoralis; Solidago sempervirens — Flora of North America (eFloras); Stokesia laevis; Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Athyrium angustum; Athyrium asplenioides; Dryopteris marginalis; Matteuccia struthiopteris; Onoclea sensibilis; Osmunda spectabilis; Osmundastrum cinnamomeum; Polystichum acrostichoides; Andropogon gerardii; Carex amphibola — Flora of North America (eFloras); Carex crinita; Carex grayi; Carex laxiculmis; Carex pensylvanica; Carex plantaginea; Carex stipata; Carex stricta; Carex vulpinoidea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Sporobolus heterolepis; Andromeda polifolia — Flora of North America (eFloras); Aronia arbutifolia; Aronia melanocarpa; Cephalanthus occidentalis; Clethra alnifolia; Cornus amomum; Cornus racemosa; Cornus sericea; Eubotrys racemosa; Hamamelis virginiana; Hydrangea quercifolia; Ilex glabra; Ilex verticillata; Itea virginica; Kalmia latifolia; Lindera benzoin; Myrica pensylvanica; Rhododendron viscosum; Rhus aromatica; Rosa carolina; Sambucus canadensis; Spiraea latifolia — Flora of North America (eFloras); Spiraea tomentosa; Vaccinium corymbosum; Viburnum acerifolium; Viburnum dentatum; Viburnum lentago; Viburnum nudum; Viburnum trilobum; Amelanchier canadensis; Asimina triloba; Betula nigra; Cercis canadensis; Cornus florida; Magnolia virginiana

**Lady Bird Johnson Wildflower Center:** Amsonia hubrichtii; Amsonia tabernaemontana; Amsonia tabernaemontana var. salicifolia; Aquilegia canadensis; Arisaema triphyllum; Asclepias incarnata; Asclepias syriaca; Asclepias tuberosa; Baptisia australis; Caltha palustris; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eupatorium perfoliatum; Eurybia divaricata; Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Helenium autumnale; Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lilium superbum; Lobelia cardinalis; Lobelia siphilitica; Maianthemum racemosum; Mimulus ringens; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Phlox divaricata; Phlox paniculata; Phlox stolonifera; Physostegia virginiana; Pycnanthemum virginianum; Rudbeckia fulgida; Rudbeckia hirta; Rudbeckia laciniata; Silphium perfoliatum; Solidago nemoralis; Solidago sempervirens; Stokesia laevis; Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Athyrium angustum; Athyrium asplenioides; Dryopteris marginalis; Matteuccia struthiopteris; Onoclea sensibilis; Osmunda spectabilis; Osmundastrum cinnamomeum; Polystichum acrostichoides; Andropogon gerardii; Carex amphibola; Carex crinita; Carex grayi; Carex laxiculmis; Carex pensylvanica; Carex plantaginea; Carex stipata; Carex stricta; Carex vulpinoidea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Sporobolus heterolepis; Andromeda polifolia; Aronia arbutifolia; Aronia melanocarpa; Cephalanthus occidentalis; Clethra alnifolia; Cornus amomum; Cornus racemosa; Cornus sericea; Eubotrys racemosa; Hamamelis virginiana; Hydrangea quercifolia; Ilex glabra; Ilex verticillata; Itea virginica; Kalmia latifolia; Lindera benzoin; Myrica pensylvanica; Rhododendron viscosum; Rhus aromatica; Rosa carolina; Sambucus canadensis; Spiraea latifolia; Spiraea tomentosa; Vaccinium corymbosum; Viburnum acerifolium; Viburnum dentatum; Viburnum lentago; Viburnum nudum; Viburnum trilobum; Amelanchier canadensis; Asimina triloba; Betula nigra; Cercis canadensis; Cornus florida; Magnolia virginiana

## NJ nursery information and purchasing

**Pleasant Run Nursery:** Amsonia hubrichtii; Amsonia tabernaemontana — Amsonia tabernaemontana 'Storm Cloud' (cultivar option); Amsonia tabernaemontana var. salicifolia; Aquilegia canadensis; Asclepias incarnata; Asclepias incarnata 'Ice Ballet'; Asclepias syriaca; Asclepias tuberosa; Baptisia australis; Caltha palustris; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eupatorium perfoliatum; Eurybia divaricata; Eurybia divaricata — Aster divaricatus 'Eastern Star' (cultivar option); Eutrochium dubium — Eupatorium dubium 'Baby Joe' (cultivar option); Eutrochium maculatum — Eupatorium maculatum 'Gateway' (cultivar option); Eutrochium purpureum; Helenium autumnale — Helenium autumnale Mariachi™ 'Fuego' PP25977 (cultivar option); Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lobelia cardinalis; Lobelia siphilitica; Maianthemum racemosum; Mimulus ringens; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Phlox divaricata — Phlox divaricata 'Blue Moon' (cultivar option); Phlox paniculata — Phlox paniculata 'Blue Paradise' (cultivar option); Phlox stolonifera; Physostegia virginiana; Pycnanthemum virginianum; Rudbeckia fulgida — Rudbeckia fulgida var. deamii (variety option); Rudbeckia hirta; Rudbeckia laciniata; Solidago nemoralis; Stokesia laevis — Stokesia laevis 'Peachie's Pick' (cultivar option); Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Dryopteris marginalis; Matteuccia struthiopteris; Onoclea sensibilis; Osmundastrum cinnamomeum; Polystichum acrostichoides; Andropogon gerardii; Carex amphibola; Carex grayi; Carex laxiculmis — Carex laxiculmis Bunny Blue® PPAF (cultivar option); Carex pensylvanica; Carex plantaginea; Carex stricta; Carex vulpinoidea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Sporobolus heterolepis; Aronia arbutifolia — Aronia arbutifolia 'Brilliantissima' (cultivar option); Aronia melanocarpa — Aronia melanocarpa Ground Hug® PP31821 (cultivar option); Cephalanthus occidentalis — Cephalanthus occidentalis Fiber Optics® PP29475 (cultivar option); Clethra alnifolia — Clethra alnifolia 'Compacta' (cultivar option); Cornus amomum; Cornus racemosa; Cornus sericea — Cornus sericea (stolonifera) Arctic Fire® 'Red' PP18523 (cultivar option); Hamamelis virginiana; Hydrangea quercifolia — Hydrangea quercifolia Gatsby Moon® PP25413 (cultivar option); Ilex glabra — Ilex glabra 'Compacta' (cultivar option); Ilex verticillata — Ilex verticillata 'Jim Dandy' (cultivar option); Itea virginica — Itea virginica Fizzy Mizzy® PP33549 (cultivar option); Kalmia latifolia — Kalmia latifolia 'Olympic Fire' (cultivar option); Lindera benzoin; Myrica pensylvanica; Rhododendron viscosum; Rhus aromatica — Rhus aromatica 'Gro-Low' (cultivar option); Rosa carolina; Sambucus canadensis — Sambucus canadensis 'Adams' (cultivar option); Spiraea latifolia; Spiraea tomentosa; Vaccinium corymbosum — Vaccinium corymbosum 'Blue Jay' (cultivar option); Viburnum acerifolium; Viburnum dentatum — Viburnum dentatum Blue Muffin® (cultivar option); Viburnum nudum — Viburnum nudum Brandywine™ (cultivar option); Viburnum trilobum — Viburnum trilobum 'Bailey Compact' (cultivar option); Amelanchier canadensis; Asimina triloba; Betula nigra — Betula nigra Dura-Heat® (cultivar option); Cercis canadensis; Cornus florida; Magnolia virginiana

**New Moon Nursery:** Aquilegia canadensis; Asclepias incarnata; Asclepias incarnata 'Ice Ballet'; Asclepias tuberosa; Baptisia australis; Caltha palustris; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eupatorium perfoliatum; Eurybia divaricata; Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Helenium autumnale; Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lobelia cardinalis; Lobelia siphilitica; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Phlox divaricata; Phlox paniculata; Phlox stolonifera; Physostegia virginiana; Pycnanthemum virginianum; Rudbeckia fulgida — Rudbeckia fulgida v. fulgida (variety option); Rudbeckia hirta; Rudbeckia laciniata; Silphium perfoliatum; Solidago nemoralis; Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Dryopteris marginalis; Matteuccia struthiopteris; Polystichum acrostichoides; Andropogon gerardii; Carex amphibola; Carex crinita; Carex grayi; Carex laxiculmis; Carex pensylvanica; Carex plantaginea; Carex stricta; Carex vulpinoidea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Sporobolus heterolepis

**Pinelands Nursery:** Amsonia hubrichtii; Aquilegia canadensis; Asclepias incarnata; Asclepias syriaca; Asclepias tuberosa; Baptisia australis; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eurybia divaricata; Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Helenium autumnale; Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lobelia cardinalis; Lobelia siphilitica; Mimulus ringens; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Pycnanthemum virginianum; Rudbeckia fulgida; Rudbeckia hirta; Rudbeckia laciniata; Solidago nemoralis; Solidago sempervirens; Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Dryopteris marginalis; Matteuccia struthiopteris; Onoclea sensibilis; Osmundastrum cinnamomeum; Polystichum acrostichoides; Andropogon gerardii; Carex crinita; Carex pensylvanica; Carex plantaginea; Carex stipata; Carex stricta; Carex vulpinoidea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Cephalanthus occidentalis; Clethra alnifolia; Cornus amomum; Cornus racemosa; Cornus sericea; Hamamelis virginiana; Hydrangea quercifolia; Ilex glabra; Ilex verticillata; Itea virginica; Lindera benzoin; Myrica pensylvanica; Rhododendron viscosum; Rhus aromatica; Rosa carolina; Sambucus canadensis; Spiraea latifolia; Spiraea tomentosa; Vaccinium corymbosum; Viburnum acerifolium; Viburnum dentatum; Viburnum nudum; Viburnum trilobum; Amelanchier canadensis; Asimina triloba; Betula nigra; Cercis canadensis; Cornus florida; Magnolia virginiana

## Additional references

**NC State Extension:** Amsonia hubrichtii; Amsonia tabernaemontana; Aquilegia canadensis; Arisaema triphyllum; Asclepias incarnata; Asclepias syriaca; Asclepias tuberosa; Baptisia australis; Caltha palustris; Chelone glabra; Conoclinium coelestinum; Coreopsis lanceolata; Echinacea purpurea; Eupatorium perfoliatum; Eurybia divaricata; Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Helenium autumnale; Heliopsis helianthoides; Iris versicolor; Liatris spicata; Lilium superbum; Lobelia cardinalis; Lobelia siphilitica; Maianthemum racemosum; Mimulus ringens; Monarda didyma; Monarda fistulosa; Muenchhusia moscheutos; Penstemon digitalis; Phlox divaricata; Phlox paniculata; Phlox stolonifera; Physostegia virginiana; Pycnanthemum virginianum; Rudbeckia fulgida; Rudbeckia hirta; Rudbeckia laciniata; Silphium perfoliatum; Solidago nemoralis; Solidago sempervirens; Stokesia laevis; Symphyotrichum laeve; Symphyotrichum novae-angliae; Symphyotrichum novi-belgii; Tiarella cordifolia; Verbena hastata; Vernonia noveboracensis; Veronicastrum virginicum; Athyrium asplenioides; Dryopteris marginalis; Onoclea sensibilis; Osmundastrum cinnamomeum; Polystichum acrostichoides; Andropogon gerardii; Carex grayi; Carex laxiculmis; Carex pensylvanica; Carex plantaginea; Chasmanthium latifolium; Deschampsia cespitosa; Elymus virginicus; Eragrostis spectabilis; Juncus effusus; Panicum virgatum; Schizachyrium scoparium; Sorghastrum nutans; Sporobolus heterolepis; Andromeda polifolia; Aronia arbutifolia; Aronia melanocarpa; Cephalanthus occidentalis; Clethra alnifolia; Cornus amomum; Cornus racemosa; Cornus sericea; Eubotrys racemosa; Hamamelis virginiana; Hydrangea quercifolia; Ilex glabra; Ilex verticillata; Itea virginica; Kalmia latifolia; Lindera benzoin; Myrica pensylvanica; Rhododendron viscosum; Rhus aromatica; Rosa carolina; Sambucus canadensis; Spiraea tomentosa; Vaccinium corymbosum; Viburnum acerifolium; Viburnum dentatum; Viburnum lentago; Viburnum nudum; Viburnum trilobum; Amelanchier canadensis; Asimina triloba; Betula nigra; Cercis canadensis; Cornus florida; Magnolia virginiana

**Wisconsin–Madison Extension:** Amsonia hubrichtii; Shared reference (3 plants)

**USACE wetland plant list (AGCP):** Shared reference (99 plants); Shared reference (2 plants); Shared reference (2 plants)

**Master Gardeners, Northern Virginia:** Amsonia tabernaemontana 'Montana'; Amsonia tabernaemontana 'Montana'

**Mt. Cuba Center:** Amsonia tabernaemontana 'Montana'

**Jordan Valley Water Conservancy District Conservation Garden Park:** Amsonia tabernaemontana var. salicifolia

**USACE National Wetland Plant List — FAQ:** Shared reference (2 plants)

**Pinelands Direct Native Plants (retail partner):** Eupatorium perfoliatum; Sporobolus heterolepis; Viburnum lentago

**Integrated Taxonomic Information System:** Eutrochium dubium; Eutrochium maculatum; Eutrochium purpureum; Muenchhusia moscheutos; Matteuccia struthiopteris; Deschampsia cespitosa; Eubotrys racemosa

**Kew Plants of the World Online:** Muenchhusia moscheutos

**Florida IFAS Extension:** Solidago sempervirens

**Native Plant Trust Go Botany:** Athyrium angustum; Andromeda polifolia

**Taxonomic Information System:** Athyrium angustum; Andropogon gerardii

**Eiseman and Smith — Proceedings of the Entomological Society of Washington:** Athyrium angustum; Osmunda spectabilis

**Penn State Extension:** Matteuccia struthiopteris

**VASCAN:** Osmunda spectabilis

**Illinois Natural Resources:** Osmunda spectabilis

**Tennessee Extension:** Carex amphibola; Carex stipata

**NJ Environmental Protection:** Carex plantaginea

**Hima Nursery:** Carex stipata

**Illinois Wildflowers, John Hilty:** Carex stipata

**NVK Nurseries:** Carex stipata

**USDA conservation service:** Carex stipata

**New Zealand Fungarium (PDD) — Manaaki Whenua Landcare Research:** Carex stipata

**Oregon State University:** Andromeda polifolia

**USACE wetland species page:** Cornus sericea

**USACE National Wetland Plant List taxon crosswalk:** Cornus sericea

**NC Division of Water Resources:** Sambucus canadensis

**University of Connecticut:** Spiraea latifolia

**Royal Horticultural Society:** Spiraea latifolia

**Cornell insect laboratory:** Shared reference (3 plants)

**The Morton Arboretum:** Viburnum nudum

**University of Illinois Extension:** Viburnum trilobum

**USDA NRCS PLANTS — American cranberrybush guide:** Viburnum trilobum

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