

Native Seedlings of the Delaware Estuary

A guide to perennial and
other herbaceous seedlings



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How to Use this Guide

To help garden caretakers with weeding and maintenance, this guide was developed to assist in the identification of plants as seedlings. The guide is designed to be an easy to use reference tool for plants typically chosen for native plant gardens. The plant list is not exhaustive. If you would like to contribute photos of additional plants to be included in the guide or have any questions, please contact Sarah Bouboulis at sbouboulis@delawareestuary.org.

Each page contains the following information for each herbaceous perennial. This guide does not include shrubs or trees.

- Large photos of young plants
- Common and scientific names, plant family
- Important ID characteristics to distinguish the plant from other plants/weeds
- Water & sun requirements
- Ecological benefits
- Seasonal points interest (for adult plant; flowering, fall color, etc.)
- Photo of the plant in bloom

Symbols

("X" indicates feature is not applicable)

Water Requirements



Dry



Moist



Wet

Sun Requirements



Full Sun



Part Sun/Shade



Shade

Ecological Benefit



Birds, Nectar
and/or seed



Pollinators, Bees
& Butterflies



Pollinators &
larval host

Season of Interest



Spring



Summer



Fall



Winter

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Glossary of Terms

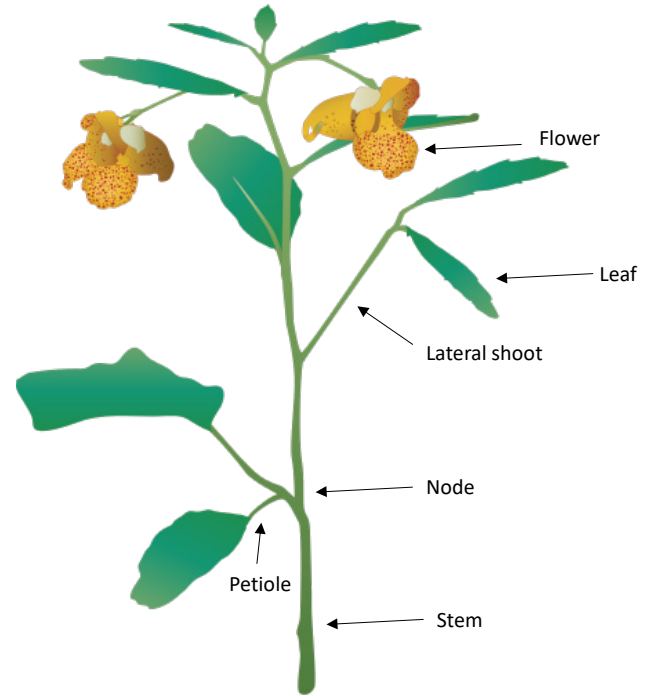
- **Alternate**-single leaves at each node
- **Basal**-leaves that grow lowest on the stem or plant
- **Coarse**-rough texture or hair bristles
- **Elongated**-long and thin leaf; not divided into parts
- **Elliptic**-shaped like an ellipse; twice as long as it is broad and widest in the middle
- **Evergreen**-green leaves throughout the year
- **Lance-shaped**-narrow ended leaves that are sharp and pointed
- **Leaflet**-not directly on the main plant stem or branch, but on a petiole/stem of a leaf
- **Lobed**-divided parts of a leaf; deeply indented margins
- **Node/Joint**-small swelling of a plant stem where leaves emerge
- **Oblong**-elongated shaped leaf with parallel sides
- **Opposite**-2 leaves attached at each node on opposite sides of the stem
- **Ovate**-wider at the base than the midpoint and tapers to the end
- **Petiole**-the stalk that joins a leaf to a stem
- **Pierced**-stem appears to puncture through base of leaves
- **Perpendicular**-leaves are at a 90 degree angle to stem
- **Rosette**-circular arrangement of leaves; usually nearest to the ground
- **Serrate**-edges of leaves have pointed/toothed notches
- **Sheath**-lower part of a leaf that surrounds the stem
- **Spikelet**- small spike of flowers in grasses and sedges
- **Stout**-sturdy, well-developed thick stem
- **Succulent**-thick, fleshy tissue adapted to hold water
- **Taper**-coming to a pointed end of a leaf
- **Veined**-appearance of the vascular tissue within the leaf; can be identified in various patterns
- **Whorl**-circular pattern of leaves, petals, sepals, or branches around a single point on a stem

Geographical Range

The plants shown in this guide are primarily native to the Delaware Estuary region. Some plants' range may not overlap the Delaware Estuary region, but are still included, particularly if they are used frequently in native gardening.



Basic Plant Anatomy



Photographs

All un-attributed photos were taken by Sarah Bouboulis, Habitat Project Coordinator, Partnership for the Delaware Estuary. Unless otherwise noted, all attributed photos were taken, with permission, from the [Lady Bird Johnson Wildflower Center](#) database. Special thanks to Pinelands Nursery & Supply for allowing us to photograph their plants.

American Sweet Flag

Acorus americanus

Acoraceae

Plant Information

- Sword-shaped leaves
- Citrus-spicy aroma
- Leaves have crimped edges
- Can be confused with Iris



Garden Specs



X

Pussy Toes

Antennaria plantaginifolia

Asteraceae

Plant Information

- Pale green-gray leaves, textured
- Low growing ground cover
- Flowers are unremarkable in the spring



Garden Specs



Wild Columbine

Aquilegia canadensis

Ranunculaceae

Plant Information

- “Clover” like in appearance
- Leaves deeply lobed and in groups of three
- Attracts hummingbirds



Garden Specs



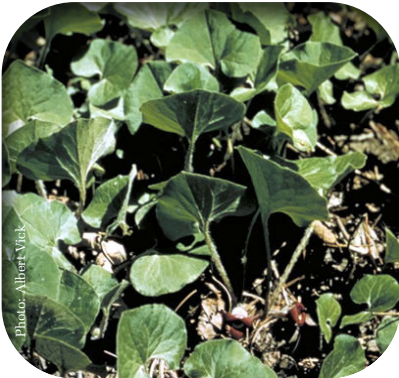
Wild Ginger

Asarum canadense

Aristolochiaceae

Plant Information

- Large heart shaped leaves
- Usually two leaves per plant
- Can create large colonies for ground cover



Garden Specs



Swamp Milkweed

Asclepias incarnata

Apocynaceae

Plant Information

- Lance-shaped leaves
- Milky sap when stems broken
- Vanilla aroma



Garden Specs



Butterfly Weed

Asclepias tuberosa

Apocynaceae

Plant Information

- Very late to emerge in spring
- Milky sap in leaves and stem
- Monarch host plant



Garden Specs



Common Milkweed

Asclepias syriaca

Apocynaceae

Plant Information

- Opposite, oblong-shaped leaves
- Leaf pairs perpendicular with short stalks
- Gray/downy leaf underside



Garden Specs



Asymmetrical Fringed Sedge

Carex crinita

Cyperaceae

Plant Information

- Drooping, narrow green-tan spikelets
- Light green 3-angled clumps
- 3-6 glossy leaves per clump



Garden Specs



Fox Sedge

Carex vulpinoidea

Cyperaceae

Plant Information

- Firm, slender 3-sided stems
- Grass-like leaf sheaths that cross-wrinkle
- Many *Carex* species look similar



Garden Specs



Turtlehead

Chelone glabra

Plantaginaceae

Plant Information

- Elongated, lance-shaped leaves
- Leaves finely toothed
- Leaves opposite of each other



Garden Specs



Blue Mistflower

Conoclinium coelestinum

Asteraceae

Plant Information

- Opposing, large-toothed triangular leaves
- Leaves on long stalks
- Young leaves light green



Garden Specs



Lance-leaf Tickseed

Coreopsis lanceolata

Asteraceae

Plant Information

- Alternating lance-shaped leaves
- Upper leaves oval-shaped
- Leaves often lobed at the base



Garden Specs



Whorled Tickseed

Coreopsis verticillata

Asteraceae

Plant Information

- Distinctive thread-like leaves
- Leaves create “whorls” around the main stem



Garden Specs



Purple Coneflower

Echinacea purpurea

Asteraceae

Plant Information

- Lower leaves are egg-shaped
- Leaves thin out as the plant grows taller
- Rough texture to leaves



Garden Specs



Boneset

Eupatorium perfoliatum

Asteraceae

Plant Information

- Stem appears pierced through the leaves
- No leaf stalk
- Hairy stem
- Tapered leaves



Garden Specs



Joe Pye Weed

Eutrochium sp.

Asteraceae

Plant Information

- Lance-shaped leaves whorled around tall stem
- Stem spotted or purple at joints



Garden Specs



White Wood Aster

Eurybia divaricata

Asteraceae

Plant Information

- Larger heart-shaped, coarsely toothed leaves near base of plant
- Smaller leaves near top as plant grows



Garden Specs



Wild Geranium

Geranium maculatum

Geraniaceae

Plant Information

- Leaves “clover” like in appearance
- Leaves lobed and irregular
- First leaves of spring often have long stalks



Garden Specs



X



Autumn Sneezeweed

Helenium autumnale

Asteraceae

Plant Information

- Lance-shaped leaves
- Leaves extend down stem like wings



Garden Specs



Swamp Sunflower

Helianthus angustifolius

Asteraceae

Plant Information

- Coarse hairs on lower stem and leaves
- Leaves very thin and stiff
- Lower leaves opposite



Garden Specs



Oxyeye Sunflower

Heliopsis helianthoides

Asteraceae

Plant Information

- Slightly triangular leaves
- Clump forming
- Leaves are opposite each other on stem



Garden Specs



Swamp Rose-Mallow

Hibiscus moscheutos

Malvaceae

Plant Information

- Green heart shaped leaves that are hairy and white underneath
- Central stem smooth
- Leaf undersides white in color



Garden Specs



Blue Flag Iris

Iris versicolor

Iridaceae

Plant Information

- Long slender leaves, sword like
- Stem is like other leaves, not obvious
- Leaves very flat



Garden Specs



Virginia Sweetspire

Itea virginica

Iteaceae

Plant Information

- Mound-shaped shrub with slender branches
- Alternate, elliptical dark green leaves that turn red in the fall



Garden Specs



Soft Rush

Juncus effusus

Juncaceae

Plant Information

- Soft, grass-like stems in clumps
- Stems round
- Flowers non-distinct



Garden Specs



Spike Gayfeather

Liatris spicata

Asteraceae

Plant Information

- Very thin leaves, leaves at base sometimes wider
- Clump forming
- Creates clear “spikes” as it grows



Garden Specs



Spicebush

Lindera benzoin

Lauraceae

Plant Information

- Slender olive-green, brown shrub twigs
- Alternate, smooth leaves with a spicy aroma
- Leaves oval shaped



Garden Specs



Cardinal Flower

Lobelia cardinalis

Campanulaceae

Plant Information

- Lower part of stem has lance-shaped toothed leaves
- Basal rosette remains over winter



Garden Specs



Great Blue Lobelia

Lobelia siphilitica

Campanulaceae

Plant Information

- Stiff, unbranched, leafy stalks
- Light green lance-like toothed leaves
- Basal rosette remains over winter



Photo by Julie Makin



Garden Specs



Virginia Bluebells

Mertensia virginica

Boraginaceae

Plant Information

- Large egg shaped leaves,
- Leaves create a continuous line with the mainstem



Garden Specs



Scarlet Beebalm

Monarda didyma 'Jacob Cline'

Lamiaceae

Plant Information

- Leaves have minty fragrance
- Square stem
- Hummingbird favorite



Garden Specs



Lavender Bee Balm

Monarda fistulosa

Lamiaceae

Plant Information

- Coarse and toothed green leaves that come to a point
- Opposite leaves on a red-brown, hairy stem
- Minty fragrance



Garden Specs



Spotted Bee Balm

Monarda punctata

Lamiaceae

Plant Information

- Opposite, lance-like leaves with a pointed tip; hairy stem
- Underside of leaf is pale and hairy
- Minty fragrance



Garden Specs



Fall Obedient Plant

Physostegia virginiana

Lamiaceae

Plant Information

- Lance-elliptic shaped leaves with teeth and pointed tips
- Square, hairless stems that swell at leaf nodes



Photo by Sally and Andy Wasowski



Garden Specs



Woodland Phlox

Phlox divaricata 'Blue Moon'

Polemoniaceae

Plant Information

- Stem lay across the ground before flowering
- Leaf shape variable
- Upper stem hairy
- Semi-evergreen



Garden Specs



Creeping Phlox

Phlox subulata

Polemoniaceae

Plant Information

- Stays low to the ground all year
- Small leaves, egg-shaped
- Upper stem hairy
- Flowers come in many colors



Garden Specs



X



Pickerelweed

Pontederia cordata

Pontederiaceae

Plant Information

- Long, heart-shaped glossy green leaves
- Parallel veins in leaves
- Leaves with very long stalks



Garden Specs



Clustered Mountain Mint

Pycnanthemum muticum

Lamiaceae

Plant Information

- Oval-toothed leaves
- Leaves have minty fragrance
- Strong square stems
- Older leaves gray in color, young leaves bright green



Garden Specs



Black-Eyed Susan

Rudbeckia hirta

Asteraceae

Plant Information

- Oval-shaped leaves covered with bristly hairs
- Leaves only slightly toothed



Garden Specs



Orange Coneflower

Rudbeckia fulgida

Asteraceae

Plant Information

- Multiple stems from root
- Elliptic-shaped leaves with 5 veins
- Leaf surfaces can be smooth or have short hairs



Garden Specs



Little Bluestem Grass

Schizachyrium scoparium

Poaceae

Plant Information

- Grass, generally more blue and brown than green
- Clump forming



Garden Specs



Pointed Blue-eyed Grass

Sisyrinchium angustifolium

Iridaceae

Plant Information

- Likely mistaken for grass
- There are often “wings” off the main stem to distinguish from grass



Garden Specs



X



Bluestem Goldenrod

Solidago caesia

Asteraceae

Plant Information

- Mature plant stems have bluish tone
- Long thin leaves
- Leaves toothed



Garden Specs



Gray Goldenrod

Solidago nemoralis

Asteraceae

Plant Information

- Leaves bluntly toothed
- Leaves & stems graying with fine hairs
- Leaves taper to the base



Garden Specs



Sweet Goldenrod

Solidago odora

Asteraceae

Plant Information

- Anise scented leaves when crushed
- Leaves not toothed, narrow
- Delaware state herb



Garden Specs



Thin Hairy Rough-Leaf Goldenrod

Solidago rugosa

Asteraceae

Plant Information

- Narrow-toothed rough leaves
- Tall, hairy stems with arching branches
- Deeply veined leaves



Garden Specs



New York Aster

Symphotrichium novi-belgii

Asteraceae

Plant Information

- Lance-shaped leaves clasped around rough stem
- Lower leaves disappear by bloom time
- Stems slender, leaves remain small



Garden Specs



New England Aster

Symphotrichum (Aster) novae-angliae

Asteraceae

Plant Information

- Hairy stem
- Lance-shaped leaves clasp around stem
- Stout stem



Garden Specs



Aster 'Wood's Blue'

Symphiotrichum sp.

Asteraceae

Plant Information

- Lance shaped leaves
- Clumps for most of spring, having rapid growth in fall
- Pollinator favorite



Garden Specs



Blue Vervain

Verbena hastata

Verbenaceae

Plant Information

- Leaves coarsely toothed, short stalked
- Lower leaves usually have many spikes



Garden Specs



New York Ironweed

Vernonia noveboracensis

Asteraceae

Plant Information

- Deep green lance-shaped leaves
- Serrated 6-8" leaves
- Grows tall quickly in full sun



Photo by Stephanie Brundage



Garden Specs



Golden Alexanders

Zizia aurea

Asteraceae

Plant Information

- Leave heavily divided into 2-3 “leaflets”
- Leaf shape can vary
- Resembles parsley or carrots



Garden Specs



Additional Resources

Books

[Newcombs Wildflower Guide by Lawrence Newcomb](#)

[Bringing Nature Home by Douglas W. Tallamy](#)

[The Living Landscape by Rick Drake & Douglas W. Tallamy](#)

Native Plant Information

[Delaware Native Species Commission](#)

[Pennsylvania Natural Heritage Program](#)

[The Native Plant Society of New Jersey](#)

Native Plant Retailers

[Gateway Garden Center, Hockessin, DE](#)

[Inland Bays Garden Center, Frankford, DE](#)

[Red Bud Native Plant Nursery, Media, PA](#)

[Edge of the Woods Native Plant Nursery, Orfield, PA](#)

[SummerSweet Native Plants, Mays Landing, NJ](#)

Websites

[The Biota of North America Program \(Plant Native Ranges\)](#)

[Delaware Flora Database \(Plant Status, Delaware\)](#)

[Partnership for the Delaware Estuary \(More Resources\)](#)

Facebook Groups

Delaware Native Plant Identification & Exchange

Pennsylvania Native Plant Society Discussion Group

Native Plant Gardening in South Jersey

Phone Apps for help with Plant Identification

SEEK

PictureThis

PlantSnap



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110 South Poplar Street, Suite 202, Wilmington, DE 19801
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The Partnership for the Delaware Estuary, host of the Delaware Estuary Program, leads collaborative, science-based efforts to improve the Delaware River and Bay, which covers portions of Delaware, New Jersey, and Pennsylvania.

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