Tips on gardening with native plants in many habitats: Woodland, Meadow, Edge, Sand and Gravel

Krissy Boys, October 28, 2023

FREQUENTLY ASKED QUESTIONS: What is a native plant? What is a local genotype? What is an ecoregion? Do ecoregions define local genotypes? What are straight species? Can we use cultivars? *Please choose cultivars with discernment-refer to the research of Annie White.*

USFS DESCRIPTION OF THE ECOREGIONS OF THE UNITED STATES by Robert G. Bailey, March 1995:

Ecoregions are areas of land and water defined by similar geology, landforms, climate, vegetation and ecological processes.

PLANT HABITATS - VEGETATION TYPES OF CENTRAL NY

(Mohler, Marks and Gardescu 2006 "Guide to Plant Communities of the Central Finger Lakes Region")

Dry Uplands: e.g., Oak Forest

<u>Moist Uplands:</u> e.g., Hemlock-Beech-Birch Forest <u>Floodplain Forest</u>: e.g., Sycamore-Cottonwood Forest

Swamp Forests: e.g., Red/Silver Maple Swamp Wetlands: e.g., Cattail Wetlands, Rich Fens

Bogs: e.g., Leatherleaf Bog

Old Fields

Unique habitats: e.g., Lake Cliffs

THINK ABOUT PLANT COMMUNITIES DURING THE PLANNING PHASE. "An understanding of the vegetation types allows prediction of what sort of plant community is likely to grow in a certain place." (Mohler, Marks and Gardescu 2006 "Guide to Plant Communities of the Central Finger Lakes Region")

REFERENCES:

BONAP-Floristic Synthesis of North America USDA PLANTS NY FLORA ASSOCIATION FINGER LAKES NATIVE PLANT SOCIETY NEW ENGLAND WILDFLOWER SOCIETY

QUESTIONS: Are these plants available in the trade? Will <u>local</u> growers supply plant materials? Are these straight species or cultivars? Will you plan 2-5 years prior to planting? Is there time to collect seeds and grow plugs?

TIMELINE: Lead time needed to "**contract grow**" local genotypes (not Trillium spp.) is 1 year if the site is weed free. **Year 1**: plan/collect/ grow / <u>Collect seeds</u>: 7 months. June - December- stratify <u>seeds</u> in cooler@40°for 30/60/90 days February, March, unless broadcast seeding a meadow <u>Grow plants:</u> 8-12 weeks April May. <u>Plant Plugs</u>- June, July, August

WHY PLANT NATIVE PLANTS?

- Manage biodiversity/ plant foraging hubs (e.g., Tallamy 2007)
- •Resource for pollinators, native insects and other animals
- •Beautiful, interesting, educational
- •Requires less: fertilizer, pesticides, water, time, mowing.
- •Honor sense of place

ELEMENTS OF A NATIVE PLANT LANDSCAPE

- Trees
- •Shrubs
- •Herbaceous

Forbes

Grasses

Vines

* Use herbaceous forbs, grasses and vines as groundcovers.

PLANT LIST IN ORDER OF BLOOM

Symplocarpus foetidus, - look for above ground buds in the fall. Blooms Feb. Mar.

<u>Caltha palustris</u>,- marsh marigold grows in moist to wet soil- it likes wet feet- do not allow it to dry out. ht. 2' **April**

<u>Sanguinaria canadensis</u>,- bloodroot- grow in shade or part sun, moist to dry soils- prefers alkaline soils- ht. 6" April

Asarum canadensis, wild ginger- grow in shade to part sun ht. 3-5" April.

<u>Stylophorum diphyllum-,</u> wood poppy- grow in part sun to full shade -moist to dry soils, ht. 18-24" **May**

Phlox divaricata, - wild phlox- grow in shade to part sun- moist to dry soils ht. 18"

Aquilegia canadensis- wild columbine- grow in full sun or shade, moist or dry soils.

ht. 18-36" depending on the amount of light and moisture- May.

<u>Geranium maculatum</u>,-wild geranium- grow in part sun or full shade- low growing edge plant No deer browse ht.18" May.

<u>Mertensia virginica</u>,- Virginia blue bells- found in drifts on shady stream banks-grow in shade or part sun. ht. 18". May

Zizia aurea, -golden alexanders- grow in sun or shade, wet or dry sites-2-3'

<u>Packera aurea</u>- golden ragwort- easy to grow from division or seeds-grow in wet or dry soil in full shade to full sun. **foliage is a 4- season ground cover**- May.

Amelanchier spp. - shad bush provides year-round interest with flowers, fruit, fall color and bark.

Staphlea trifolia – bladdernut a suckering shrub -excellent sub for woody non-native honeysuckle.

Height: 10-15' spread- 10-20' grow in part sun to full shade. April-May

<u>Tiarella cordifolia</u> foam flower- low growing edge plant- grow in part sun to full shade, moist to dry soil. Height 12" May

<u>Chrysogonum virginianum</u> green and gold-grow in full sun to part shade- requires good drainage Height 6" May

<u>Iris versicolor</u>, blue flag iris -grow in full sun to part shade in wet to moist soil- flowers in sun Height $2\frac{1}{2}$ combine with *Caltha palustris*- no deer browse.

<u>Penstemon hirsutus</u>, - hairy beardtongue- grow in full sun or part shade in well-drained soil or gravel. no deer browse- low growing edge plant- naturally a west facing cliff dweller.

Height: 1-2'June

<u>Physocarpus opulifolius</u>, nine bark- medium to large sized shrub- grow in part shade in well-drained soils- beautiful bronze to bright yellow fall color, exfoliating bark ht. 6-12'

<u>Rubus odoratus</u>- purple- flowering raspberry- found in ravines on moist gravelly banks and lake cliffs- grow in full sun to part shade in moist soil- 6' x 6'.

<u>Sambucus canadensis</u> – elderberry- fast growing multi-stemmed shrub excellent wildlife habitat alternative to honeysuckle- ht.7-15' Cut back to the ground to renew.

<u>Asclepias tuberosa</u>, butterfly weed-full sun in good garden soil - sandy or gravelly soils work well for this plant, medium to dry ht.1-2.5'

<u>Asclepias incarnata</u>,-swamp milkweed -naturally found in wet soils in full sun- grows well in part shade and average garden soil moisture. ht. 2 - 5'- depending on light and moisture.

<u>Lobelia cardinalis</u>- cardinal flower- shade or sun and moist to dry soil, best in evenly moist to wet soils and full sun. ht 2-4'- July

Monarda didyma- bee balm - moist soils, in full sun or deep shade

No deer browse –hummingbirds-ht.3-4' July.

<u>Lobelia siphilitica</u>, - great blue lobelia -sun or shade, moist to dry soils. biennial,-ht. 18-36" July <u>Rudbeckia laciniata</u>- cutleaf coneflower - full sun and wet soil- excellent (tall) ground cover, flowers in deep shade, wilts in extreme dry conditions but will not die back- July

<u>Monarda fistulosa</u>- wild bergamot – dry- well-drained sites in full sun to part shade –ht. 1-4' July <u>Allium cernuum</u> -wild onion -full sun or part shade moist to dry soil –ht. 18" July

<u>Eupatorium maculatum</u>- spotted Joe Pye weed - Easy to grow wetland plant full sun to part shademoist to regular soil ht. 3-6' mid- July

<u>Helenium autumnale</u>- Helen's flower - full sun to part shade- medium to wet soils- ht.3-5' August <u>Veronicastrum virginicum</u>- culver's root- full sun to part shade-ht. 3-6' August

FALL ASTERS, GRASSES AND GOLDENRODS: The cornerstones of a meadow planting in central New York. Asters can fit into a more formal setting. Cut them by half or to the ground mid-season to reduce stem length.

<u>Eurybia divaricata</u>- fall flowering white wood aster foliage is an excellent ground cover- ht. 18" <u>Symphiotrichum novae-angliae</u>- New England aster - violet-blue, purple, or pink aster with a large inflorescence- moist soil in full sun, tolerates part shade- to keep short cut back by half mid-season. ht. 3-5'August

<u>Symphiotrichum laeve</u>- smooth blue aster - violet blue flowers- waxy blue foliage, full sun in well-drained soils in alkaline sites- can self-sow into a ground cover-ht. 3-4' x spread 2-3'late August-October

<u>Symphiotrichum sagittifolium</u>-arrow leaved aster - upright and tall- place in the back row of the border- full sun and well-drained soil- ht. 2-3'September

<u>Symphiotrichum latifolium</u>-calico aster - hundreds of tiny florets on low spreading plants- an edge of the border plant, holds up taller plants that tip into paths- sun or part shade in moist to dry soil Height 1.5-2.5'late August- October

<u>Symphiotrichum cordifolium</u>- heart-leaved or blue wood aster - tough woodland plant found along the road edge in late November- full sun to part shade-ht. 2-3'

Elymus canadensis- Canada wild rye - blue green foliage & fruit -sun, moist or dry soils- ht. 2-4' *Elymus hystrix*-bottlebrush grass- part shade to sun, dry or wet soils-ht. 18-30"

Elymus riparius- riverbank wild rye- full sun to full shade-dry to moist soils-ht. 2-3'

Elymus virginicus- Virginia wild rye- full sun to full shade- dry to moist soils-ht. 2-3'

Sorghastrum nutans- Indian grass- aggressive- full sun- moist to dry soil-ht. 4-6'.

<u>Schizachyrium scoparius</u>- little bluestem – full sun- dry- lean soil- ht. 2'

Solidago juncea - early goldenrod-full sun- dry-moist-ht.1-4 ft. July

Solidago caesia - wreath goldenrod- part shade- dry-moist ht. - 18-24" August

Solidago nemoralis- goldenrod-full sun-dry-moist ht. 18-24" September

Solidago sempervirens - seaside goldenrod- full sun- dry-moist ht. 18-24" October and November

Solidago flexicaulis- zig-zag goldenrod- part shade- dry-moist- ht. 1-4' August

Solidago bicolor- silver rod- full sun-dry-moist ht. 4-14" September

<u>Clematis virginiana</u>, -virgin's bower- a vine- ground cover or screen- wet or dry soils- flowers best in full sun- August.

<u>Partheocissus quinquefolia-</u> Virginia creeper- host plant for the Pandorus Sphinx moth- sun or shade, moist or dry- fall color- September- October

<u>Viburnum acerifolium</u>- maple-leaved Viburnum- acid soils - moist-dry shade- slow growing-ht. 5' <u>Lindera benzoin</u>- spice bush -slow growing, medium sized shrub- moist to dry site. Height 8-10'

Shrubby dogwoods- fall fruits are high quality fatty food source for migrating/ overwintering birds <u>Cornus racemosa</u>-grey dogwood-colonizer, moist to dry soil, full sun to part shade, 10' <u>Cornus amomum</u>- silky dogwood – moist to wet soil- sun to part shade- 5-8' <u>Cornus sericea</u>, - red-twigged dogwood – moist to wet soil-sun to part shade- 4-5' <u>Cornus alternifolia</u> - alternate-leaved dogwood- part shade to full sun-ht. 15-20'

NON-NATIVE NON-INVASIVE SPECIES USED IN THE EAST AND WEST ENTRANCE AREAS OF THE MUNDY WILDFLOWER GARDEN

wood poppy, Stylophorum diphyllum creeping phlox, Phlox stolinifera smooth phlox, Phlox glaberima downy phlox, Phlox pilosa garden phlox, Phlox paniculata anise hyssop, Agastache foeniculum beardtongue, Penstemon digitalis hairy beardtongue, Penstemon hirsutus giant solomen's seal, Polygonatum commutatum purple Cone Flower, Echinacea purpurea New York Ironweed, Vernonia spp.

Joe Pye weed, Eutrochium spp. southern genotype

GET TO KNOW NATIVE PLANTS IN THEIR HABITATS

- Wildflowers of the Field and Forest, Clemants and Gracie, 2006
- Newcomb's Wildflower Guide, Lawrence Newcomb, 1977
- Peterson's Field Guide, McKenny and Peterson, 1998

- Finger Lakes Native Plant Society- <u>www.fingerlakesnativeplantsociety.org</u>
- Join our discussion group "FLNPS" www.yahoogroups.com
- Books Leopold, Cullina, Phillips

SOURCES FOR NATIVE PLANTS IN THE FINGER LAKES

- Plant sale: mid-May
- October: FLNPS seed collectingDecember: FLNPS Seed Exchange
 - Local nurseries:
 - o Grow Wild! A Native Plant Nursery www.growwildnatives.com
 - o Go Native! perennials gonativeskan@gmail.com
 - o Plantsmen <u>www.plantsmen.com</u>
 - O White Oak Nursery www.whiteoaknursery.biz
 - o Amanda's Garden www.amandagarden.com

Remember: When choosing native plants as habitat plants, select mostly straight species, not cultivars, propagated from seeds. Do not dig plants from the wild or purchase dug plants. Ask your supplier how the plants were grown.