

Designing Wild with Wildflowers & Natives

Presented by Bob Streitmatter



LUTHY
BOTANICAL
GARDEN

- **Why Natives...they work!!** Why plant tender plants (azalea, tea roses....) that are barely hardy or have serious insect/disease problems?
 - Adapted to our often unpredictable & harsh environment plants...USDA Zone 5...changing
 - Hardy Low susceptibility to **severe damage** from insects and diseases
 - Often less water and fertilizer needed
 - Part of ecosystem...part of the biological memory...oaks with 100's of users & complex *mycorrhizal relationships*

Concepts from Native-inspired Gardens

- **Literally inspired by ecosystems**...prairies, meadows, deserts...using native trees, shrubs, grasses and perennials...
 - Grasses are indispensable, here in Illinois
 - Extensive palette to choose from (listed below)
- **Layer planting**, using trees, shrubs, grasses, perennials, annuals (native), groundcover, bulbs
 - Under-plant everything with bulbs & ephemerals: Daffodil, Crocus, Scilla, Snowdrops, Magic Lily, Bluebells, Bloodroot, Dutchman's Breeches...
- **Repetition, massing & randomness** provides continuity and mimics natural growth patterns of groves & colonies. Utilize masses of groundcover, perennials or shrubs...you want diversity but large drifts are helpful
 - Let things spread and self-sow; Columbine, Virginia bluebells, Partridge Pea, Solomon's Plume
- **Right plant, right place**...consider environmental conditions (Solomon's seal in shade, roses in sun) and mature size; correct placement will yield less maintenance...requires less pruning/deadheading, less pesticide, water & fertilizer...drought tolerance, clay tolerance (specialists)...nasty tolerance (generalists)
 - Nature provides a playbook...it's okay to pick favorites, but plants grow in communities, sharing like requirements
- **Lawns are used sparingly**, instead incorporate planting & paving...use only what you need or none at all
- **Non-natives, annuals & tropicals, are used in moderation** (i.e. annual color)...concentrate for effectiveness and ease of maintenance
- **Butterfly and Pollinator planting**
- **Blend interior & exterior**...outdoor living rooms & kitchens; garden rooms created by extending into garden with walls, fences, borders, hedges, paving, structure...
- **Use stone native stone in the garden**...architectural or naturalistic, creates a quality of permanence & blends with nature
- **Design for the Senses**
 - Water brings nature into garden...sound of trickling water, reflection of quiet pool
 - Animate the garden with wildlife & wind...
 - Design for Evening...
 - Use form & texture...it's not all about flowers
- **Nature is not static...celebrate it**; embrace seasonal change and reflect year-round beauty of natural landscape...native trees, shrubs, grasses and wildflowers yields amazing seasonal interest....Evening Island & Great Basin, Charles River, Battery Park, Lincoln Memorial Garden
 - Spring brings flowers...trees, shrubs, wildflowers, ephemerals...
 - Fall Color & Winter Interest...“some plants look better dead”
- **Create a Sense of Place**; tap into the regional feel & spirit of the prairie, desert, northwest...

Trees...bullet indicates plants discussed

- **Red Maple** *Acer rubrum* 50x35' full sun; red flowers in early spring (march); fall color, flowers, petioles, twigs and seeds are all red to varying degrees
- **Sugar Maple** *Acer saccharum* 60x40' full sun-part shade; invasive in native oak understory; used for flooring & cabinetry

- **Black Alder** *Alnus glutinosa* 30x15' full sun; wet sites; female cones/strobiles & male catkins
- **Serviceberry** *Amelanchier canadensis* 15-25x18' full sun-part shade; 4-season interest; tasty fruit often used to make jellies and even pemmican (Native American)
- **Pawpaw** *Asimina triloba* 20x20' full sun-part shade; large droopy, tropical 10-12" leaves that have a butter yellow fall color; maroon flower; 3-5" banana-like fruit that turns brown when ripe and tastes like banana custard; prized by opossum and raccoons
- **River Birch** *Betula nigra* 50x30' full sun; beautiful cinnamon bark, gold fall color
- **Shagbark Hickory** *Carya ovata* 70x30' full sun; exfoliating bark; yellow-golden brown in fall; fuel value almost=coal; green hickory use for curing meats
- **Redbud** *Cercis canadensis* 25x25' full sun-part shade; pink-magenta flowers in spring; multi-stemmed woodland understory tree; orange cast inner bark; *Cercis canadensis* 'Forest Pansy'
- **Winter King Hawthorn** *Crataegus viridis* 'Winter King' 18x18' full sun; persistent red fruit
- **Kentucky Coffeetree** *Gymnocladus dioica* 60x40' full sun; large bipinnately compound leaves; late to leaf out in spring and casts a filtered shade; awkward and open but sculptural habit; dark brown pods lined with gummy pulp and brown seeds; roasted seeds as coffee substitute; cooking eliminated toxins; male & female trees (dioecious) or polygamo-dioecious (perfect flowers & dioecious)
- **Common Witchhazel** *Hamamelis virginiana* 20x18' full sun-full shade; yellow flowers in fall; yellow fall color
- **Red Cedar** *Juniperus virginiana* 40x15-20' full sun; native evergreen with deep green to bronze-purple blushed foliage; blue green to blue black fruit used to flavor gin & meat dishes; beautiful red stringy bark; cedar-apple rust can be a problem
- **Crabapple** *Malus* 'cvs.' 5-40 x 8-25' full sun, usually with flowers & fruit; **M. 'Golden Raindrops'** 20x15' white flowers; golden fruit; disease resistance; **M. 'Red Jewel'** 15x10' white flowers & showy red fruit; **M. 'Prairiefire'** 18x18 deep pink flowers & dark red fruit
- **Black Gum or Tupelo** *Nyssa sylvatica* 50x35' full sun-light shade; incredible orange-yellow-scarlet-purple fall color; lowlands
- **Hophornbeam** *Ostrya virginiana*
- **White Oak** *Quercus alba* 70x70' full sun; wine to bronze to burgundy in fall color; used for flooring; furniture(quarter-sawn); barrel-making and ship building (USS Constitution). As England's forests began to dwindle, emissaries were sent to America in search of a new timber source. White oak became a target because wood has properties similar to English Oak. In the northeast; one can still find some of the remnant trees marked for harvest with the Kings stamp.
- **Swamp White Oak** *Quercus bicolor* 60x40' full sun; gold fall color; good street tree & tolerant of urban conditions
- **Scarlet Oak** *Quercus coccinea* 70x40' full sun; scarlet-russet red fall color, similar to Pin Oak but without chlorosis issues
- **Shingle Oak** *Quercus imbricaria* 50x55' full sun; leaves turn yellow brown to russet brown fall color and can persist into winter; no lobes or serration...entire margins; wood easily splits to make shingles; dense habit and winter character make it a great screen; you can even integrate it into to windbreaks
- **Bur Oak, Mossycup Oak** *Quercus macrocarpa* 70x60' full sun; yellow brown to purple brown fall color; shaggy or mossy acorns; very thick bark enabled its survival during prairie fires; where most others met their demise
- **Chinkapin Oak** *Quercus muehlenbergii* 50x50' full sun; yellow to orange brown in fall; tolerates very dry sites...part of hill prairie ecosystem
- **Red Oak** *Quercus rubra* 70x40' full sun; red orange-burgundy fall color
- **Prairie Flame Shining Sumac** *Rhus copallina* 6-8 x 10' full sun; glossy foliage with bright orange-red fall color, cream flower clusters in July
- **Staghorn Sumac** *Rhus typhina* 10-15x15-20' full sun; great fall color; 'Laciniata' is a cutleaf; 'Tiger Eyes' has yellow foliage
- **Sassafras** *Sassafras albidum* 50x30' full sun-part shade; orange; scarlet and purple in fall; dark blue berry on red pedicels in early fall; fruit is highly prized by wildlife & seldom seen
- **Baldcypress** *Taxodium distichum* 60x25' full sun & wet soil; living fossil, rust-copper fall color
- **Blackhaw Viburnum** *Viburnum prunifolium* 15x10' full sun-part shade; formal in habit; blue black fruit; red fall color

Shrubs & Vines

- **Lead Plant** *Amorpha canescens* 3x3' full sun;
- **Black Chokeberry** *Aronia melanocarpa* 5x4 full sun-part shade; 'Autumn Magic' or 'Iroquois Beauty'
- **Red Chokeberry** *Aronia arbutifolia* 'Brilliantissima' 8x4' full sun-part shade;
- **American Bittersweet** *Celastrus scandens* twining vine, full sun; male & female plants are needed
- **Midwinter Fire Dogwood** 6x6' full sun-part shade;
- **Gray Dogwood** *Cornus racemosa* 10-15x12' full sun-part shade; 'Geauga' 8x4'
- **Muskingum Gray Dogwood** *Cornus racemosa* 'Muszam' 4-5x6' full sun-part shade;
- **Vernal Witchhazel** *Hamamelis vernalis* 8x6' full sun-part shade; salmon to orange flowers in early spring
- **White Dome Hydrangea** *Hydrangea arborescens* 'Dardom' 4x3' full sun-part shade; will not droop; new introduction, 'Incrediball' is not supposed to droop
- **Virginia Creeper** *Parthenocissus quinquefolia* holdfast vine, full sun-full shade;
- **Fragrant Sumac** *Rhus aromatica* 4-6x6' full sun-part shade;
- **Gro Low Sumac** *Rhus aromatica* 'Gro Low' 2.5x5' full sun-part shade;
- **Pasture Rose** *Rosa carolina* 2-3' full sun; single pink flowers June-July; red rose hips; disease resistant; spreads by suckers
- **Hancock Coralberry** *Symphoricarpos x chenaultii* 'Hancock' 2x5' full sun-part shade;
- **Coralberry** *Symphoricarpos orbiculatus* 3x3' full sun-part shade;
- **Chicago Lustre Viburnum** *Viburnum dentatum* 'Synnestvedt' 8x6' full sun-part shade; 'Autumn Jazz'

Perennials

- **Baneberry** *Actaea rubra* part shade-full shade;
- **Nodding Pink Onion** *Allium cernuum* 1-2' full sun; it will seed, pink flowers
- **Bluestar** *Amsonia* full sun-part shade; light blue flowers in early summer; native to Missouri
- **Wild Columbine, Red Columbine** *Aquilegia canadensis* 2-3' full sun-part shade; it will seed
- **American Spikenard** *Aralia racemosa* 2-4' part shade-full shade; greenish white spikes July/August, followed w/red berries
- **Goat's beard** *Aruncus* 3-5' part shade-full shade;
- **Wild Ginger** *Asarum* part shade-full shade;
- **Swamp Milkweed** *Asclepias incarnata* 2-4' full sun; great for moist heavy soils...rain garden & butterflies
- **Butterfly Weed** *Asclepias tuberosa* 2-3' full sun; orange-red June-August followed by milkweed-like pods, butterflies lay eggs it since parts are poisonous to birds and they avoid it, cut flower
- **Aster** *Aster* 2-4' full sun; violet with gold center August to October, cut back in late spring to maintain form, cut flower
- **Blue False Indigo** *Baptisia* 2-4' full sun; blue spikes May to June, dried pods that follow can be used in dried arrangements, several prairie species are wonderful in the garden, cut flower
- **False Aster** *Boltonia* 4-5' full sun; white or pink daisy-like flowers, cut flower
- **Bugbane** *Cimicifuga* or *Actaea* part shade-full shade;
- **Dutchman's Breeches** *Dicentra cucullaria* 6-8" part shade-full shade; ephemeral;
- **Coneflower** *Echinacea* 3-4' full sun; rosy-purple with orange center, July to September. Looks great with yarrow, grasses and evergreens, cut flower
- **Joe Pye Weed** *Eupatorium* 4-6' full sun-part shade; purple flowers in late summer; 'Little Joe' is 3-4'
- **Wild Geranium** *Geranium maculatum* 18" full sun-part shade; rose-lavender flowers in April & May
- **Perennial Sunflower** *Helianthus* full sun; 'Lemon Queen'
- **Ox-eye Sunflower** *Heliopsis* 2-3' full sun; yellow August to October, cut flower
- **Alumroot** *Heuchera americana* 1-2' full sun-part shade; var. Interior, 'Green Spice'
- **Virginia Bluebells** *Mertensia* 2' part shade-full shade; ephemeral, underplant hosta, it will seed
- **Wild Quinine** *Parthenium integrifolium* 3-5' full sun; long blooming white flower clusters
- **Woodland Phlox, Sweet William** *Phlox divaricata* 1' part shade-full shade; bright lavender April-May; it will seed
- **False Dragonhead** *Physostegia* 2-3' full sun-part shade; pink to lavender in mid to late summer, cut flower; 'Vivid'
- **Solomon's Seal** *Polygonatum* 3-4' part shade-full shade; white flower in early summer, variegated form is great, dwarf form *Polygonatum humile*
- **Yellow Coneflower** *Ratibida pinnata* 4' full sun; yellow in late summer; prefers lean dry soils
- **Black-eyed Susan, Orange Coneflower** *Rudbeckia fulgida* 2-4' full sun; yellow July-September

- **Brown Eyed Susan** *Rudbeckia triloba* 2-4' full sun; yellow July-September
- **Bloodroot** *Sanguinaria canadensis* 12" part shade-full shade;
- **Rosin Weed** *Silphium integrifolium* 3-5' full sun;
- **Cup Plant** *Silphium perfoliatum* 5-9' full sun; it will seed
- **Prairie Dock** *Silphium terebinthinaceum* 5-10' full sun; basal rosette of foliage with giant flower stalks
- **Solomon's Plume** *Smilacina* 18" part shade-full shade; white plumes followed by red berries
- **Goldenrod** *Solidago* 2-4' full sun; yellow flower in late-summer & fall. It blooms same time as ragweed & mistakenly blamed for allergies. 'Fireworks' & 'Golden Fleece'
- **Zigzag Goldenrod** *Solidago flexicaulis* 2-3' full sun-part shade; unusual that it tolerates shade
- **Ohio Goldenrod** *Solidago ohioensis* 3-4' full sun;
- **Anise-scented Goldenrod** *Solidago odora* 3-4' full sun;
- **Celandine Poppy, Wood Poppy** *Stylophorum diphyllum* 16" part shade-full shade; flowers May-June; it will seed
- **Bellwort or Marybells** *Uvularia* 18" part shade-full shade;
- **Culvers Root** *Veronicastrum* 3-5' full sun;

Grasses used as massing, screening or specimen, cut back and/or burn in spring

- **Palm Sedge** *Carex muskingumensis* 1-3' full sun-part shade; moist to wet soil; needs ample water in hot dry locations
- **Pennsylvania Sedge** *Carex pensylvanica* 8-10" full sun-part shade; moist soils
- **Switchgrass** *Panicum virgatum* 'Heavy Metal' & 'Northwind' 4-6' full sun; bluish foliage turning gold in fall
- **Red Switchgrass** *Panicum virgatum* 'Rostrahlbusch', 'Shenandoah', 'Ruby Ribbons', 3-5' full sun; green foliage turning burgundy in fall
- **Little Blue Stem** *Schizachyrium* 2-4' full sun; rusty cast foliage with reddish seedheads in fall; 8-12" wide clumps.
- **Indian Grass** *Sorghastrum* 3-5' full sun; showy bronze red plumes in fall
- **Prairie Dropseed** *Sporobolus* 1-2' full sun; pink cast, gold in fall. Compact, feathery texture makes attractive mass or drift; underplant with bulbs. 'Tara' is a new compact cultivar.

Taking a nature-inspired approach to the garden, using natives, is a path to something more than a collection of plants or less maintenance...more time to enjoy the garden & celebrate its beauty

"In every walk with nature one receives far more than he seeks...When you tug at a single thing in nature, you find it attached to the rest of the world."

John Muir

Sources for Native Plants

- Luthy Botanical Garden...perennials/wildflowers
- Green View Nursery, Dunlap, Illinois
- D. A. Hoerr Nursery, Peoria, Illinois
- Possibility Place Nursery, Monee, Illinois
- Prairie Nursery, Westfield, Wisconsin (mail-order)
- Forest Farm, Williams, Oregon (mail-order)