



GARDENING: GOING NATIVE

CHAT BOX

- ✘ Give your first name, location, and one thing you want to learn today.
- ✘ My name: Sue Reinardy, UW-Extension Master Gardener Volunteer – Hayward, WI - And I want to learn about the topics you are interested in.

CLASS OBJECTIVES

- ✘ Goal: Be a more natural gardener
- ✘ Native vs. non-native
- ✘ Habitat
- ✘ Plants for your Garden
- ✘ Phenology



MOVING TOWARDS NATURAL

- ✘ Use and appreciation of native plants
- ✘ Natural alternative to manicured lawns
- ✘ Help preserve native species and habitat
- ✘ Environmental considerations
- ✘ Purist vs. Moderation

DEFINITIONS

- ✘ Native vs. Non-Native
- ✘ Exotics
- ✘ Invasive



POLL

- ✘ Are cultivars of native plants as beneficial as the native species that have not been “cultivated”? Yes or No

SUPERIOR MIXED FOREST



- Continental climate – cold winters, warm summers
- Before settlement – Northern WI was covered by mixed conifer-hardwood forest
- Spruce, fir, cedar, hemlock, tamarack, pine, birch, maple, poplar
- Only small remnants remain

GARDON JARGON 101



Echinacea

purpurea

‘White Swan’



Genus



Specific
Epithet



Cultivar



Species



Botanical Name

CREATING NATURAL HABITATS

- ✘ Plant to suit natural topography
- ✘ Shield from winds
- ✘ Plants to suit the animals you want to attract
- ✘ Strive for diverse plantings
- ✘ Coordinate habitat with water use
- ✘ Locate food plants and feeders by shelter
- ✘ Don't use inorganic pesticides
- ✘ Arrange plants to lead shy wildlife closer
- ✘ Supplement food plants



NATIVE GARDEN TIPS

- ✘ Maintain at least a small area of grass
- ✘ Cut back plants in fall, burn every three years or mow 1/3 each year on a rotating basis
- ✘ Prune trees and shrubs so they grow more open, like nursery-grown trees
- ✘ Limit your number of species; avoid excessively tall plants
- ✘ Plant in clumps for a natural look
- ✘ Use clump-forming plants rather than spreaders

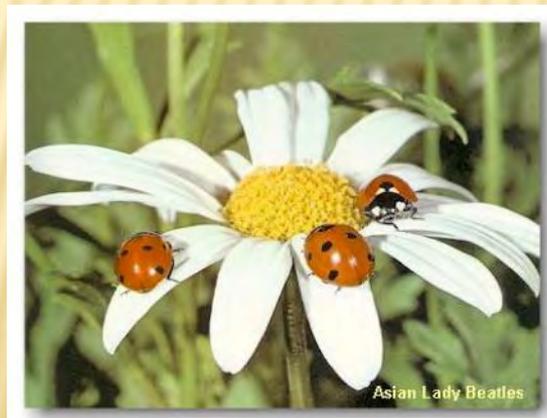
PLANTING TIPS TO ATTRACT WILDLIFE



- ✘ Plant around a backbone of native, non-invasive plants
- ✘ Preserve tall trees
- ✘ Create vertical niches
- ✘ Plant for seasonal sequences for food sources throughout the year
- ✘ Create habitat niches

BENEFICIAL BUGS & TOADS

- ✘ Plantings to attract beneficial bugs:
 - daisy, sunflower
 - carrot
 - peas, legumes
 - spinach
 - oaks



- ✘ Toad habitat:
 - Like a dark damp place
 - Under logs, boards
 - Need 2 small openings
 - Fond of water



POLLINATORS

- ✘ Bees, Butterflies, Moths, Beetles, Flies, Birds, Bats



- ✘ Food: plant in groups to increase efficiency
- ✘ Plant with bloom season in mind
- ✘ Plant a variety
- ✘ Herbs and annuals (even though non-native) are good pollinators
- ✘ Recognize weeds as a food source
- ✘ Avoid pesticides

POLLINATORS: WATER AND SHELTER

- ✘ Provide layers of plants
- ✘ Leave dead snags for nesting sites
- ✘ Build bee boxes
- ✘ Leave some area of soil uncovered
- ✘ Group plantings
- ✘ Add water features
- ✘ Water sources include shallow or sloping side



BUTTERFLY GARDENS

- ✘ Best colors: red, yellow, orange, pink and purple
- ✘ Full sun
- ✘ Easy eating with short tubes or long, flat petals
- ✘ Provide windbreaks



BUTTERFLY FAVORITES

- ✘ Perennials: Yarrow, Bee Balm, Shasta Daisy, Coreopsis, Verbena, Phlox, Coneflower, Butterfly weed
- ✘ Annuals: Zinnias, Dill, Cosmos, Petunia, Goldenrod, Morning Glory, Sweet Alyssum, Cleome, Marigold
- ✘ Host Plants: Borage, Dill, Snapdragon, Nasturtium, Parsley, Fennel, Butterfly Weed, Clover, Violets, Milkweed, Hollyhock



HUMMINGBIRDS

- ✘ Attracted to red, but also pink, rose, orange and purple
- ✘ Deep tubular flowers
- ✘ Feeders –
4 parts water to 1 part sugar (5:1, 7:1 ok), boil for 2 minutes. No color needed



FOR THE BIRDS



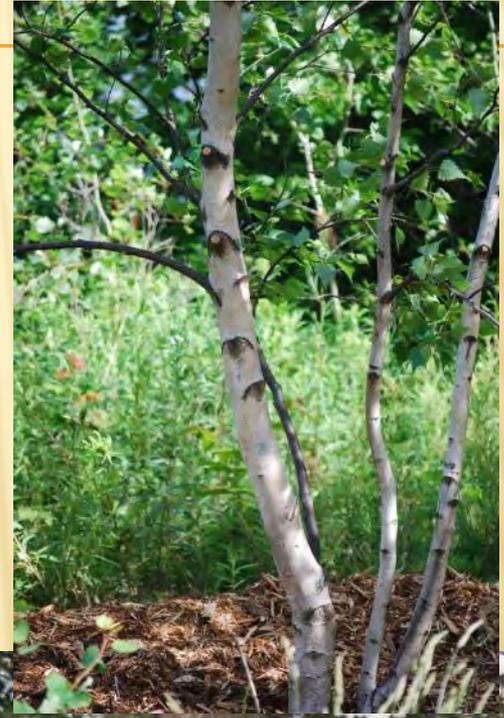
- ✘ Flower Gardens
- ✘ Composting Leaves
- ✘ Ground cover
- ✘ Rough Grass
- ✘ Small shrubs
- ✘ Consistent source of food, water, shelter
- ✘ Think vertically
- ✘ Avoid pesticides, excess fertilizer

CHAT BOX

- ✘ Questions/Comments?
- ✘ What are you trying to attract to your gardens?

NATIVE TREES FOR WILDLIFE

- ✘ Paper Birch
- ✘ American Beech
- ✘ Pin Cherry
- ✘ Best Conifers:
 - + Eastern Red Cedar
 - + Eastern arborvitae
 - + White spruce
 - + Eastern hemlock
 - + Common juniper



NATIVE TREES BEST FOR LANDSCAPE USE



- ✘ Acer species (maples)
- ✘ Betula species (birch)
- ✘ Carpinus caroliniana (blue beech)
- ✘ Celtis occidentalis (hackberry)
- ✘ Quercus species (oaks)
- ✘ Tilia americana (basswood, linden)

NATIVE CONIFERS

- ✘ Juniper
 - + Prefers neutral to slightly acidic well-drained soil in full sun; tolerates drought and wind
- ✘ Balsam fir
 - + Best in cool, damp places in partial shade to sun, keep away from hot, drying winds
- ✘ White Spruce
 - + Best in well-drained, slightly acidic soils in full sun, keep away from winter winds and road salt
- ✘ White Pine
 - + Best in fertile, acidic, well-drained soils in full sun. Does not need protection from winds but keep away from road salt
- ✘ White cedar-arborvitae
 - + Moisture retentive soil in full sun or part shade, keep away from dry, windswept locations

NATIVE SHRUBS FOR WILDLIFE



- ✘ Bearberry
- ✘ Red-osier Dogwood
- ✘ Winterberry
- ✘ Spicebush
- ✘ Blackberry, Raspberry
- ✘ Highbush Cranberry
- ✘ Serviceberry

NATIVE LANDSCAPE SHRUBS

- ✘ *Amelanchier* species (serviceberries)
- ✘ *Ilex verticillata* (winterberry)
- ✘ *Physocarpus opulifolius* cultivars (ninebark)
- ✘ *Potentilla fruticosa* cultivars (shrubby cinquefoil)
- ✘ *Prunus nigra* 'Princess Kay' (Canada plum)
- ✘ *Viburnum* species (viburnums)



WEBSITE TOOL

- × itreetools.org provides a variety of tools and info on trees in your county – developed through USDA.

POLL QUESTION

✘ What is green mulch?

1. Organic bark mulch
2. Leaf mulch
3. Layering plants vertically
4. Ground covers



Chanticleer Garden, Wayne, PA

NATIVE PERENNIALS FOR WILDLIFE

- ✘ Wild Columbine
- ✘ New England Aster
- ✘ Bee Balm
- ✘ Black-eyed Susan
- ✘ Violets



FULL SUN NATIVE PERENNIALS



- ✘ Generally do not like heavy clay soils
- ✘ Many will tolerate shade in morning or late afternoon
- ✘ For success need sun between 9am and 3pm
- ✘ Appreciate organic matter

BEE BALM

MONARDA, WILD BERGAMOT

- ✘ 15-48 inches tall
- ✘ Flowers bloom early to mid-summer in red, pink, purple or white
- ✘ Sun to part shade in well-drained, moist soil
- ✘ Powery mildew can be a problem
- ✘ Attracts hummingbirds, butterflies, and bees



CONEFLOWER

ECHINACEA SPP



- ✘ Natives and hybrids
- ✘ 2-3 ft tall and wide
- ✘ Bloom July to August
- ✘ Full sun, well-drained soil, drought tolerant
- ✘ Reseed and hybridize easily: to keep the plants you started with, deadhead spent flowers or pull seedlings.

IRIS

- ✘ Native & Hybrids
- ✘ Full sun, well-drained
- ✘ Divide mid to late summer every 3-5 years for good blooms
- ✘ Iris borer – remove foliage in fall, if brown streaks on leaves – dig rhizomes and dip in solution of 1 part bleach to 4 parts water



COLUMBINE

AQUILEGIA

- ✘ Self-seeder, cross hybrids easily
- ✘ Hybrids tend to be short-lived
- ✘ Full to part sun; moist, well-drained soil
- ✘ Bloom in spring



BUTTERLY WEED

ASCLEPIAS

TUBEROSA



© Larry Allain

- ✘ Native to dry prairies
- ✘ Flowers from late spring to late summer
- ✘ Attracts butterflies
- ✘ Moist to dry soils in full sun to light shade
- ✘ Mature plants tolerate dry soil

Photo: Larry Allain @ USDA-NRCS PLANTS Database

ASTER

ASTER NOVAE-ANGLIAE

- ✘ Native, fall-bloomer
- ✘ Moist, average soil in full sun to part shade
- ✘ Likes consistent moisture
- ✘ Pinch back stems in late May for bushier plants
- ✘ Divide plants in spring every 3rd year
- ✘ Avoid too much nitrogen which results in floppy plants and abundant foliage



TURTLEHEAD

CHELONE

- ✘ White turtlehead native to moist prairies
- ✘ Evenly moist to wet, rich soil in full sun to light shade
- ✘ Mature plants will tolerate dry spells
- ✘ Bloom late summer and early fall
- ✘ Plants spread by rhizomes but do not become invasive



JOE-PYE WEED

EUPATORIUM PURPUREUM



- ✘ Native to wet slopes, low prairies and woodlands
- ✘ Prefers moist, average to rich soil in full sun to light shade
- ✘ Tolerates drier conditions
- ✘ Easy to grow once established
- ✘ Divide in spring or fall
- ✘ Reseeds
- ✘ Plants too close may suffer from powdery mildew

OBEDIENT PLANT

PHYSOSTEGIA VIRGINIANA



- ✘ Full sun to part shade
- ✘ Moist, well-drained soil but will tolerate drier conditions and part shade
- ✘ Showy native, fall flowers
- ✘ Spreads aggressively by underground rhizomes
- ✘ Plant in shade for less aggressive or plant 'Miss Manners' (white), 'Variegata' (pale pink), or 'Vivid' (Rose)

BLAZING STAR OR GAYFEATHER

LIATRIS SPICATA



Photo: ©2010 Grow Native!

- ✘ Native to prairies, savannas
- ✘ Showing pink-purple flower spikes in summer
- ✘ Moist, fertile, well-drained soil in full sun
- ✘ Once established, somewhat drought resistant
- ✘ Plants can reseed
- ✘ Wisconsin's special concern list
- ✘ Attracts bees, hummingbirds, butterflies

BLACK-EYED SUSAN

RUDBECKIA HIRTA VAR. *PULCHERRIMA*

- ✘ Native in variety of WI habitats
- ✘ Biennial or short-lived perennial
- ✘ Blooms attract bees and butterflies
- ✘ Winter interest
- ✘ Adapts well to container culture
- ✘ Sow seeds two years in a row for yearly blooming, once established plants will self-seed
- ✘ Rich soils tend to produce weak-stemmed plants



SPIDERWORT TRADESCANTIA

- ✘ Native to dry, sandy grasslands and open woodlands
- ✘ Drought and heat tolerant
- ✘ Plants may go dormant after flowering, cut foliage to ground after flowering to keep plants neat and halt seed production
- ✘ Reseed and in fertile soil can become aggressive
- ✘ Lean, well-drained soil in full sun or light shade



NATIVE MIDWEST PRAIRIE GRASSES

- ✘ Tallgrass species
 - + Big Bluestem
 - + Switchgrass
 - + Prairie Cordgrass
- ✘ Midgrass Species
 - + Little Bluestem
 - + Prairie Dropseed
 - + Sideoats Grama
- ✘ Shortgrass Species
 - + Buffalograss
 - + Blue Grama



Native Bluestem

Missouri Botanical Garden

PHENOLOGY

- ✘ Study of plant and animal life cycles and how these are influenced by seasons and variations in climate
- ✘ Lilac is the cornerstone for observations
- ✘ Chicory is a summer-blooming indicator plant, when first flowers open prevent damage from squash vine borer
- ✘ Canada thistle in bloom, apple maggot adults are abundant and fruit should be protected

PHENOLOGY PLANTING TIPS

- ✘ Plant peas when forsythia blooms
- ✘ Plant potatoes when the first dandelion blooms
- ✘ Plant beets, carrots, cole crops, lettuce and spinach when lilac is in first leaf
- ✘ Plant corn when oak leaves are the size of a squirrel's ear
- ✘ Plant bean, cucumber, and squash seeds when lilac is in full bloom
- ✘ Plant tomatoes when lily-of-the-valley plants are in full bloom
- ✘ Transplant eggplant, melons, and peppers when irises bloom.

CHAT BOX

✘ Do you have a phenology tip to share?

OBSERVING AND RECORDING

- ✘ Keep a garden journal
- ✘ Organize data
- ✘ Photography
- ✘ Take note of first appearance of plant or birds or insects
- ✘ Mark beginnings and endings (1st frost, temperature)



RESOURCES

- ✘ *A Guide to Natural Gardening*, Jim Knopf, Sally Wasowski, John Kadel Boring, Glenn Keator, Jane Scott, Erica Glasener, Fog City Press 1997
- ✘ www.wildones.org Website on native plants, natural landscapes
- ✘ <https://dnr.wi.gov/topic/Invasives/> DNR Invasive website
- ✘ www.pollinator.org download a free 'Pollinator Friendly Planting Guide'

RESOURCES

- ✘ <http://www.uwgb.edu/biodiversity/phenology/index.htm>

UW Green Bay data base of phenology events

- ✘ <http://clean-water.uwex.edu/pubs/>

UW Extension phenology calendars (under “Special Topics”)

- ✘ *Landscaping with Native Plants of Wisconsin*,
Lynn M. Steiner

THANK YOU

