



Gardening with Shrubs

SUE REINARDY

UW EXTENSION

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Agenda

Definitions & Tibits

What Shrubs Can Do

Native & Natural

The Matrix Layer – groundcovers

The Structure Layer

The Vignettes Layer

Pruning & Feeding

Resources



Longwood Gardens, Kennett Square, PA

Inspiration:



- Minnesota Landscape Arboretum
- Olbrich Gardens, Madison
- Private Gardens
- Missouri Botanical Gardens
- Spooner Research Station, Teaching & Display Garden

Definitions & Tibits

Types: Deciduous, Evergreen, Flowering

- Shrubs include any woody plant that does not die down to ground level in winter
- A shrub usually has more than one stem originating at or close to ground level
- Roses were the first shrubs grown and purchased a century ago
- Shrubs & trees are at a disadvantage to perennials in the nursery trade because they take longer to develop and introduce new varieties
- The range of offerings had been restricted until the introduction of container-grown hardy plants (before that only bare-root)

Benefits

Shrubs are found worldwide and play a crucial role in soil stabilization, supporting insects, storing carbon, among other benefits.

- Add permanence, structure, and presence throughout four seasons
- Can be pruned to control size & shape
- Once established low maintenance



Left to Right: Forever Gold Potentilla, Hydrangea arborescens 'Anna Belle', Mugo Pine, Golden Bridalwreath Spirea, Spruce tree, Late Panicle Hydrangea, Pink Diamond Hydrangea (with under plantings of Hosta and Lamium (Dead Nettle), Ironwood tree, Witch Hazel

Why choose a shrub vs. perennial?



- Can be used in a variety of ways: backdrop, ground cover, hedge, focal point
- Shrubs help support perennials that may flop if not staked
- Can serve as a framework for restrained vines, stick to vines that can be cut to the ground for easy clean-up
- Provide year-round presence, permanence

Native and Natural

- Goal – build gardens from native plant foundations and with ample floral diversity, even if some of that diversity isn't native. Rely on native trees and shrubs, they make positive, long-term contributions to the ecology of place.
- Some cultivars outperform natives
- Features in your garden that add richness of life are often overlooked such as a dead stump or small basin for water
- Plant for attractive flowers, handsome fall colors, abundant fruits for birds



Herbivory

- Plants that are eaten by pollinators, wildlife
- If nothing is eating your plants, what life is your garden really supporting?
- Research shows that less than 20% is eaten in the growing season



“Meadow” - 2011 to 2021

Remember: nothing in the garden stays that way for long.



Lupine and grasses



Lupine, grasses, wild plum, blackberries, white pine, maple, birch, coreopsis, heliopsis, spruce, sweet fern, ferns, aster, monarda, milkweed



Native Flowering Shrubs

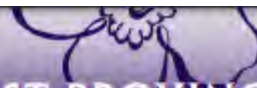
Flowering Basics

- Most flowering shrubs need at least 4 hours of sun – without it most new wood will fail to ripen enough to produce flower buds the next season
- Shrubs that flower on wood produced the same season will do well in semi-shade (example: Hydrangea, Potentilla)
- Think of shrubs in groups – ex. Lilacs bloom for about 2 weeks, combine with a Shrub Rose, Elderberry, Dogwood, or small tree such a crabapple to extend season



BLOOM PERIODS

FOR THE LAURENTIAN MIXED FOREST PROVINCE



The following chart lists plants and the time they are in bloom throughout the growing seasons. Choose a variety of flower colors and make sure something is blooming at all times! Note for all charts: When more than one species of the same genus is useful, the genus name is followed by "spp."

Botanical Name	Common Name	Mar	April	May	June	July	Aug	Sept	Oct	Nov
Trees & Shrubs										
<i>Amelanchier arborea</i>	downy serviceberry			white	white					
<i>Arctostaphylos uva-ursi</i>	kinnikinnick			purple-blue	purple-blue					
<i>Cephalanthus occidentalis</i>	common buttonbush									
<i>Cornus canadensis</i>	bunchberry dogwood				white	white	white	white		
<i>Crataegus crus-galli</i>	cockspur hawthorn			white, yellow-green	white, yellow-green	white, yellow-green	white, yellow-green	white, yellow-green		
<i>Dasiphora fruticosa</i>	shrubby cinquefoil			yellow	yellow	yellow				
<i>Gaultheria procumbens</i>	eastern teaberry					pinkish white	pinkish white	pinkish white		
<i>Hamamelis virginiana</i>	American witch-hazel								yellow	yellow
<i>Ilex verticillata</i>	common winterberry				white	white				
<i>Prunus virginiana</i>	chokecherry			white	white					
<i>Rhus typhina</i>	staghorn sumac				yellow green	yellow green	yellow green			
<i>Sambucus canadensis</i>	black elderberry				white	white				
<i>Sorbus americana</i>	American mountain ash			white	white					
<i>Tilia americana</i>	American basswood			yellow	yellow					
<i>Vaccinium angustifolium</i>	low sweet blueberry			pinkish white	pinkish white					
<i>Viburnum acerifolium</i>	mapleleaf viburnum			white	white					

Source:
 "Selecting
 Plants
 for
 Pollinators"

<https://www.pollinator.org/PDFs/Laurentian.rx9.pdf>



Photo: Missouri Botanical Garden

Downy Serviceberry, *Amelanchier arborea*

- Grows 15-25 feet tall
- White blooms late spring/early summer
- Sun: Full sun to part shade
- Can be grown in most soils with medium moisture conditions

American Bladderwort *Staphylea trifolia*

- Fast-growing, suckering
- Moist soils
- Dense colonies
- 10-15 feet
- Blue Blooms late spring/early summer
- Part Shade to Shade



Photo: Missouri Botanical Gardens

Kalm St. John's Wort, *Hypericum kalmianum*

- Grows 2-3 feet tall; small, dense, evergreen shrub or subshrub
- Pink/purple blooms late summer/early fall
- Sun: Full sun to part shade
- Grows in Loam to Sandy soil in Medium to moist conditions



Photo: Missouri Botanical Garden



New Jersey Tea (*Ceanothus americanus*)

- Grows 2-3 feet tall;
- White blooms late spring/early summer
- Sun: Full to sun
- Grows in Loam to Sandy soil in dry-medium conditions

Northern Bush Honeysuckle (*Diervilla lonicera*)

- Grows 1-3 feet tall;
- Orange, yellow or gold blooms in summer
- Sun: Full to part sun
- Grows in Loam to Sandy soil in dry-medium conditions



Native Roses

*Carolina Rose (*Rosa Carolina*)-1-3 feet, full sun

*Meadow Rose (*Rosa Blanda*)-3-5 feet, full to part sun, almost thornless

*Virginia Rose (*Rosa virginiana*)- 5-8 feet, full sun, is easy to transplant, and prefers well-drained acidic soils but is adaptable. It is also salt tolerant.



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

Spruce: Best in well-drained, slightly acidic soils in full sun, keep away from winter winds and road salt

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

Conifers – Miniature vs. Dwarf

- Miniature: grow less than 1 inch per year
- Dwarf: grow 1-6 inches per year
- Can be grown in pots, need winter protection, the dwarfs last longest in pots



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)



What's wrong with this picture?



The Matrix Layer (Groundcovers)

- Green mulch
- Consider first, plant last
- Up to 75% in the wild, try for 50% in a home garden



Cotoneaster adpressus 'Tom Thumb' or 'Little Gem'

- Full sun to part shade
- Best grown in moist, loamy, well-drained soils
- Good drainage is important, this is a tough and adaptable plant that can withstand poor soils



Potentilla fruticosa

- Full sun to part shade
- Blooms May through September
- Easily grown in average, medium moisture, well-drained soils
- Prefers evenly moist soils
- Best flowering occurs in full sun, but plants tolerate part shade
- Prune as needed



Spirea japonica



- Full sun, tolerates light shade
- Non-native, Blooms May to August
- Easily grown in average, medium moisture, well-drained soils, tolerates a wide range of soils. Prefers rich, moist loams.
- Remove faded flower clusters as practicable (light shearing is an option) to encourage additional bloom.
- Flowers on new wood, so prune in late winter to early spring if needed.
- Photo: Copyright herreid

Pinus sylvestris 'Hillside Creeper'



- Common name: Scotch Pine
- Grows in full sun, likes acidic soil
- 'Hillside Creeper' grows 12"+ per year, prostrate, spreading cultivar. Over the first 8-10 years, it typically grows 2' tall but spreads to 8' wide. Growth rate slows considerably as plant ages.

Juniperus horizontalis

- Woody-creeping juniper
- Full sun, prefers dry sandy soil, intolerant of wet soils
- Spread 6-18" tall, 3-8 feet side
- Native to North American
- Foliage is typically green to blue-green during the growing season, but often acquires purple tones in winter



Microbiota decussata 'Celtic Pride'



Common name: Siberian Cypress

- Fern-like foliage, disease resistant
- Full to part sun
- Easily grown in average, moist but well-drained soils
- Best performance is in cool summer climates

Rain Garden Shrubs

- Arrowwood - *Viburnum dentatum*
- Elderberry - *Sambucus canadensis* or *Sambucus racemosa*
- Meadowsweet - *Spiraea alba*
- Ninebark - *Physocarpus opulifolius*
- Rosebay Rhododendron - *Rhododendron maximum*
- Silky Dogwood - *Cornus amomum* (and other dogwoods as well)
- Spicebush - *Lindera benzoin*
- Hydrangea - *Hydrangea arborescens*



The Structure Layer

- Gives the garden its form
- Trees, shrubs, coarse herbaceous plants
- Target 5-10% of total planting
- Most return on investment with 3-4 seasons of interest and longevity
- Look beyond showy flowers and consider what else a plant offers for the most horticultural mileage



Shrubs-Sun to Part Shade



- Arborvitae, Chokeberry, Dogwood, Forsythia*, Hydrangea, Juniper*, Lilac*, Pine*, Ninebark, Picea abies (Spruce)*, Potentilla*, Rhododendron, Siberian Cypress*, Spirea*, Viburnum, Weigela*, Witch Hazel*

(*Plants not favored by Deer)

Shrubs: Part to full shade

Summersweet, Dogwoods,
Diervillia* (honeysuckle), smooth
hydrangea, Rhododendron,
Arrowwood vibernum, Russian
cypress*, Yew

(*Plants not favored by Deer)



A Few Tips

- Brightly colored, variegated foliage, neat & manicured – may not fit in
- Good transitional shrubs: Viburnum, Elderberry, Dogwood – they have light, informal habit that doesn't look out of place
- Try big, bold shrubs grouped with trees
- Go for borders larger than 6 feet (not many shrubs have an ultimate height/spread <3 ft.)
- Avoid straight lines



Shrub Growth Patterns



- Most shrubs/trees continue to grow, even dwarf- just at a slower pace
- Shrubs can be short-lived – even more so in cold, wet areas (ex. Barberry life 5-15 years vs. Serviceberry life of 20-50 years)
- Hardiness of plants is not an exact science

Summersweet: *Clethra alnifolia*

- Upright, multi-stemmed, spreads slowly by suckers (can dig and replant), will get large by spreading
- Blooms on new wood, clusters of white to pink flowers over a 3 weeks in summer, fragrant, late to leaf out in spring
- 3-4' tall and wide, prefers partial shade, tolerates sun if consistently moist, tolerates salt, prefers fertile acidic soils, it will die out if the soil gets too dry, deer-resistant, native
- Do not over-prune, remove old growth over no fewer than 3 years



Red Twig Dogwood: *Cornus sericea*

- Native, spread 5-9' spreads to 10'
- Full sun to part shade
- Moist to wet soil, not drought tolerant
- Dull white flowers in late May, white fruit in June
- Fall color, red stems year-round
- Attracts butterflies, bees, birds
- Deer resistant



Photo: Missouri Botanical Garden

American Cranberry Bush Viburnum

- *Viburnum opulus var. Americanum*
- 8-12' tall and wide
- Full sun to part shade, moist, well-drained soil
- White flowers in late spring (cut flowers), bright red fruit
- Good for pollinators, mammals, songbirds



Elderberry: Sambucus



- Native: *S. canadensis*, *S. racemose*
- 5-12' tall and wider, aggressive, spreading by rhizomes
- Full sun to part shade
- Moist to wet soil, tolerates dry
- White, fragrant, edible flowers in summer
- Attractive fruit
- Birds, bees, butterflies, pollinators, hummingbirds, small mammals

Sumac: *Rhus*

- Can be low-spreading shrubs, upright irregularly shaped shrubs, or trained as small trees
- All spread vigorously by suckers, branch freely
- Most produce either male or female flowers
- Prefer full sun, tolerates part shade, do well in lean soils
- Tiger Eyes® - *Rhus Typhina*



Lilac: *Syringa*



- Full sun, wide range of soils, prefer consistent moisture
- Can limit growth by pruning, but makes more sense to plant with plenty of room
- Removing spent blooms may increase bloom in next season-remove immediately after bloom since next year's buds set about a month after they bloom

Juniper - *Juniperus*

- Year-round interest, versatile in gardens, useful life expectancy is 15-30 years, wide variety
- Prefer full sun, avoid road salt, avoid wet conditions, space for the mature plant
- Upright forms have roots that dig deep into the soil, spreading types are more shallow, they do not send off suckers
- Fertilize in spring with an acidic fertilizer (Miracid)
- Trim to shape annually, do not allow plant to grow without pruning for several years, prune new growth in early summer



Arborvitae: *Thuja*



Thuja occidentalis 'Techny'

- Very versatile in garden, life expectancy is 15-40 years, common name: white cedar, all-seasons interest
- Full sun to part shade
- Important shrub/tree for wildlife shelter & food (need protection from deer & rabbits)
- Full sun to part shade, branches may break in heavy snow, need good drainage, consistent moisture
- Prune just after new growth if needed to shape

Rhododendron (Azalea)

- Full sun to partial shade, rich-acidic soil, well-drained
- 4' wide x tall, slow growing – can cut back to manage size and shape
- Blooms early to mid-spring
- Glossy leaves emerge as the blooms fade, fall foliage change are more pronounced in a sunny site
- Usually, zone 4 or 5 but can be grown in sheltered spot in zone 3

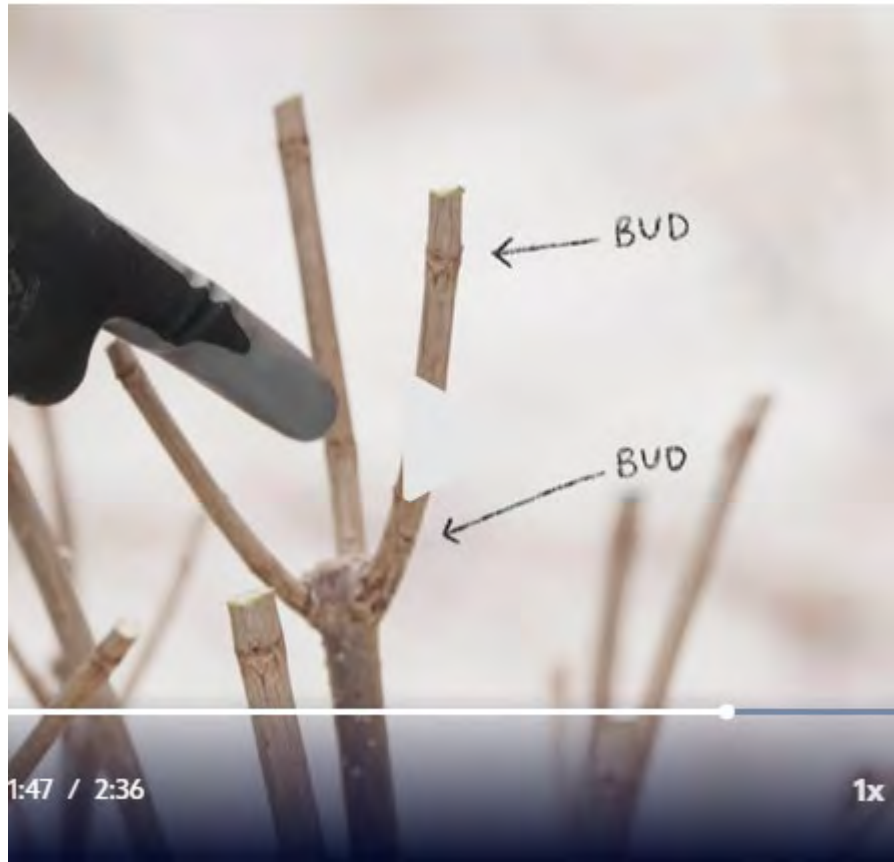


Hydrangea

- In Zone 3 – *H. arborecens* (smooth), *H. paniculate* (panicle), great cut/dry flowers
- Vary in light needs, some better in full sun, some in part shade, adapt well to a wide range of soil, avoid dry sites
- Coloration is directly related to availability of aluminum (& soil pH)- for Big Leaf Hydrangea not hardy here
- Space with mature size in mind, dwarf varieties are available
- Fertilize once in June with 10-10-10
- Deadheading is personal choice, both smooth & panicle bloom on new wood



<https://pbswisconsin.org/letsgrowstuff/>



Hydrangea paniculata 'Limelight'



The Vignettes Layer

- Pretty pictures within a planting
- Carry a garden throughout the season from one flowering event to another
- Example: Bridalwreath Spirea to Hydrangea
- Quickest way to craft visual interest is to increase the contrast



Examples



All Seasons Mixture





Inspiration

Pruning (if needed)



- Remember – you do not need to prune!
- Those that flower early – cut back immediately after flowering (ex. Lilacs)
- Summer flowering – prune in early spring (ex. Hydrangea)
- Control shape & size, pests & disease, remove suckers, remove reversion of variegated shrubs
- Stimulate vigorous growth & foliage, rejuvenate, encourage flowering (but reduces fruit production)

Pruning & Thinning

UW-Madison Division of Extension
Publications



- **[Pruning Deciduous Shrubs](https://hort.extension.wisc.edu/articles/pruning-deciduous-shrubs/)**,
<https://hort.extension.wisc.edu/articles/pruning-deciduous-shrubs/>
- **[Pruning Evergreens](https://hort.extension.wisc.edu/articles/pruning-evergreens/)**,
<https://hort.extension.wisc.edu/articles/pruning-evergreens/>



Feeding

- Most shrubs grow adequately without feeding
- Regular feeding can keep them healthy when stressed or in poor soil
- Soil-release fertilizer is best once shrub first begins to grow in spring along drip line
- Tender new growth at the wrong time can cause damage – don't fertilize after mid-summer
- Once established mature shrubs should not need watering



Garvin Gardens, Hot Springs, AR

Shrub-like Herbaceous Plant Substitutes



- Peony, *Paeonia*
- Spikenard, *Aralia cordata* 'Sun King'
- Goatsbeard, *Aruncus dioicus*
- Amsonia, 'Blue Star'
- False Indigo, *Baptisia*
- Daylily, *Hemerocallis*
- Catmint, *Nepeta*
- Russian Sage, *Perovskia atriplicifolia*
- Rhubarb, *Rheum*

Web Links

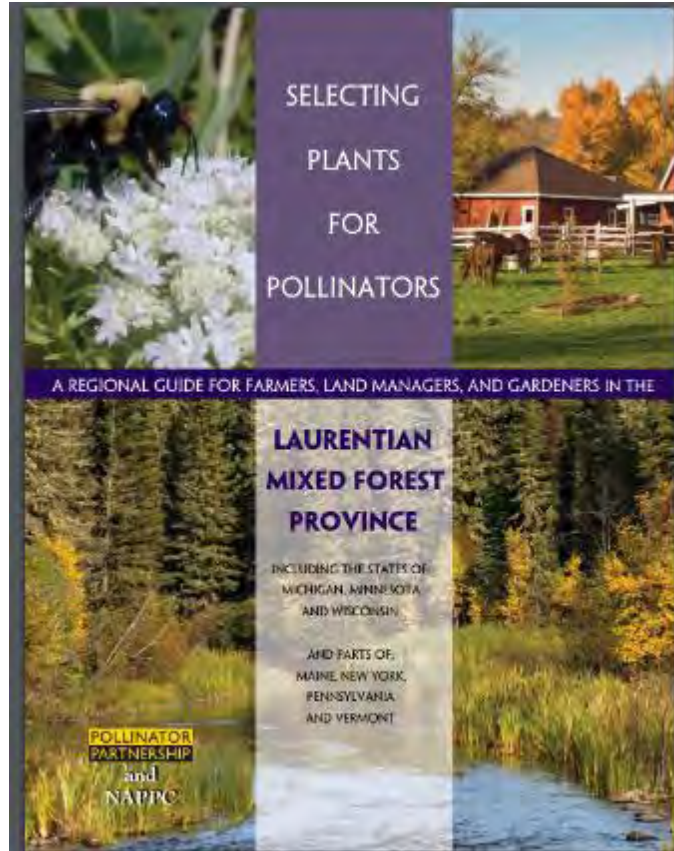
For more resources and information on North Country Master Gardener Volunteers
www.northcountrymgv.org

For links to handouts on native plants and pollinator friendly gardens:
www.northcountrymgv.org/handouts-for-meet-me-in-the-garden.html

Spooner Agriculture Research Station Teaching and Display Garden

<http://spooner.ars.wisc.edu/demonstration-garden/>

Resource-“Selecting Plants for Pollinators”



<http://www.pollinator.org/PDFs/Laurentian.rx9.pdf>

Resources

The Creative Shrub Garden, Andy McIndoe Timber Press ©2014

New Naturalism, Designing and Planting a Resilient, Ecologically Vibrant Home Garden, by Kelly Morris, Quarto Publishing-Cold Springs Press ©2021

“Plants Not Favored by Deer”, UW Extension Bulletin # A3727
<https://cdn.shopify.com/s/files/1/0145/8808/4272/files/A3727.pdf>

The Learning Store – UW Division of Extension
<https://learningstore.extension.wisc.edu/collections/lawn-garden>



Questions
/Wrap- up

Thank you

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GardenTrueNorth.com

NorthCountryMGV.org

