

Using Native Plants in your Landscape

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What does "native" mean?

A plant common in a region prior to European settlement.
A plant that was not introduced by humans.

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Common definitions of "native"

A plant found within 50 miles
A plant found within 200 miles

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Native Landscaping

Native Ecosystems
Prairie
Woodland
Savannah
Wetland

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Native Plants

Wisconsin has many different native ecosystems, often very close to each other.

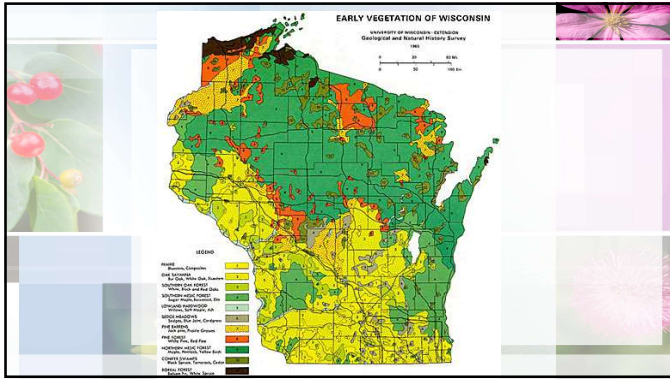
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Native Ecosystems

How do you know what was in your neighborhood 200 years ago?

- Folklore
- Diaries/stories
- Government surveys

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Wisconsin Land Survey

The survey of Wisconsin was conducted between 1832 and 1866 by the federal General Land Office.

<http://digioll.library.wisc.edu/SurveyNotes/>

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Spring Lake Twsp. Pierce Co.

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Spring Lake Twsp. Section 13

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Native Plant Location Info

Wisconsin herbarium

"The University of Wisconsin-Madison Herbarium, founded in 1849, is a museum collection of dried, labeled plants of state, national and international importance . . ."

<http://www.botany.wisc.edu/herbarium/>

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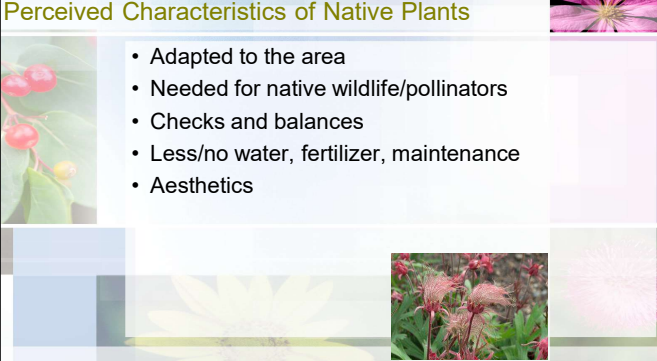
Why are we Interested in Native Plants?

- Maintenance/inputs
- Wildlife/pollinators
- Preservation
- Aesthetics
 - Sense of place
 - Diversity of species

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Perceived Characteristics of Native Plants

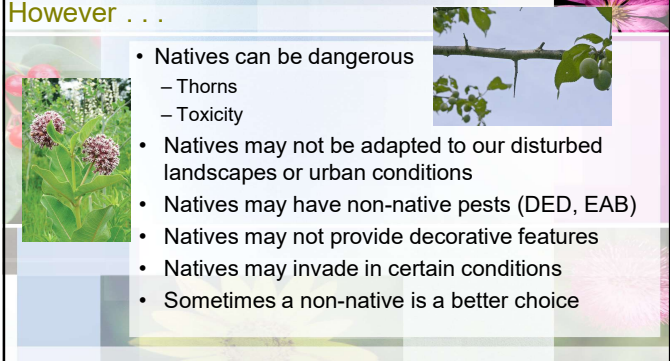
- Adapted to the area
- Needed for native wildlife/pollinators
- Checks and balances
- Less/no water, fertilizer, maintenance
- Aesthetics



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However . . .

- Natives can be dangerous
 - Thorns
 - Toxicity
- Natives may not be adapted to our disturbed landscapes or urban conditions
- Natives may have non-native pests (DED, EAB)
- Natives may not provide decorative features
- Natives may invade in certain conditions
- Sometimes a non-native is a better choice



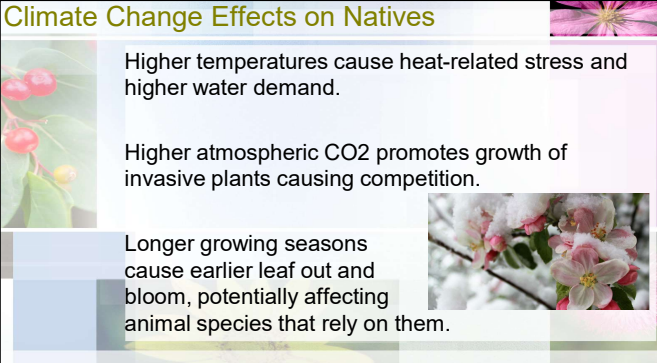
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Climate Change Effects on Natives

Higher temperatures cause heat-related stress and higher water demand.

Higher atmospheric CO2 promotes growth of invasive plants causing competition.

Longer growing seasons cause earlier leaf out and bloom, potentially affecting animal species that rely on them.




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Climate Change Effects

Native plants must adapt to new conditions, migrate to more favorable environments, or go extinct.


– Has happened in geologic time, but modern climate change is faster.



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Climate Change Effects

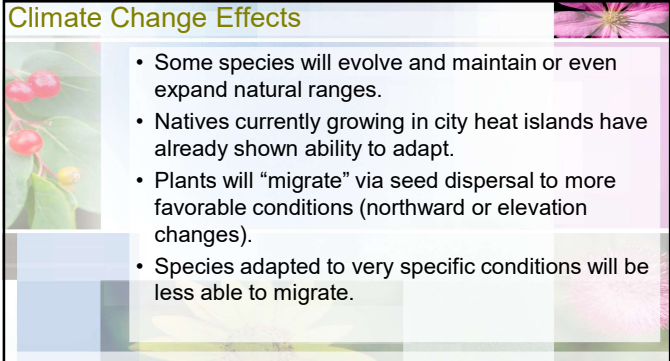
- Research suggests 25% and 85% of species may already be changing their home ranges.
- As near-native species slowly expand their known home range, do they become more native in new areas?
- Is Stevens Point the new Milwaukee?



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Climate Change Effects

- Some species will evolve and maintain or even expand natural ranges.
- Natives currently growing in city heat islands have already shown ability to adapt.
- Plants will “migrate” via seed dispersal to more favorable conditions (northward or elevation changes).
- Species adapted to very specific conditions will be less able to migrate.



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Climate Change Effects

Human Assisted Plant Migration

- Moving plants to more favorable climates BEFORE they become extinct.
- Must be done with caution so doesn't cause more problems with existing ecosystems.



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Using Natives in Your Yard

Usually not possible in residential settings to create an entire ecosystem



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Native Plant Choice is Important

- Some native plants will not thrive outside the native ecosystem
- Some native plants will not be kept in check without the native ecosystem
- Add native plants to your conventional landscape based on conditions, goals, and aesthetics.



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How to Use Native Plants

Recognize that others may not share an appreciation for native and natural landscaping.

Coneflowers and bluestem

vs.

Petunias and plastic tulips



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Design: Borders

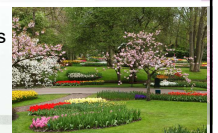
Borders that face other neighbors and the street may be best in a more traditional or "tame" design—with native plants incorporated.



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Public Perception

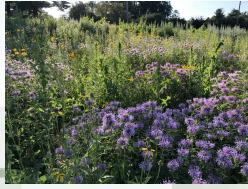
- Well-groomed appears more safe than wild
- See-through appears more safe than dense
- City dwellers consider any landscaping "natural" and don't realize the ecological benefit
 - Perception not the same as function
 - Prairies and wetlands often considered messy and negative
 - "Quality" is based on visual aspects



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Public Perception

- “Cues to care” are important for public acceptance
 - Benches, art, etc.
 - Mowed area near native
- Larger areas (acre+) perceived better



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Using Natives

Right Plant, Right Place!

Sometimes a non-native is better suited, and it can still provide the benefits of natives.

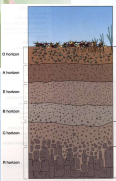


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Are Natives Always Better?

Yards and landscapes are not always “native” conditions.

- Soil conditions/compaction
- Heat islands
- Hydrology changes
- Other vegetation including exotics
- Exotic insects and diseases



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Design: Authenticity

Will you use species only?

Are varieties or cultivars acceptable to you?



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Native Landscaping

Create the native landscape to be as authentic as possible, within your existing conditions.

Choose plants based on

- * Site Conditions
- * Wildlife benefits
- * Goals (e.g., water infiltration/runoff)



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Choosing Native Plants

Plant groups rather than individual plants for most visual effect as well as insects/animals to find it

Plant near other plants that are beneficial to same insects/animals

Remember to attract all life stages.



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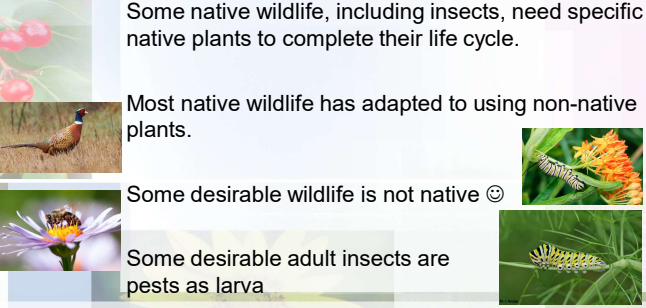
Wildlife and Native Plants

Some native wildlife, including insects, need specific native plants to complete their life cycle.

Most native wildlife has adapted to using non-native plants.


Some desirable wildlife is not native 😊

Some desirable adult insects are pests as larva



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Which wildlife do you want?



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Which Wildlife do you want?



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Birds & Butterflies & Beneficials



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Working with what you have

"Wild" spaces can be supplemented with native plants to provide for wildlife or to provide interest



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Working with what you have

Smaller yards can attract smaller wildlife; tuck choice native plants in among the "traditional" landscapes.

SUCCESSION OF VEGETATIVE COMMUNITIES



Use informal bed shapes and design like any other landscape choosing plants based on their visual and aesthetic characteristics.

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Wildlife Food

- Fruits
- Seeds
- Insects
- Nectar

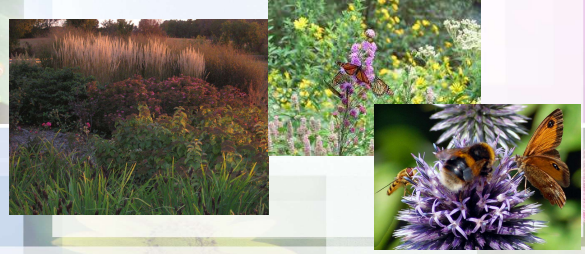


Check lists for which plants are especially attractive to desired wildlife.
(Cedar Waxwings = serviceberries; finches = coneflowers)

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Native and Natural Design

Provide plenty of variety to attract the most types of wildlife/pollinators.



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Add an appropriate water source for the wildlife you want to support.

Plant in larger patches so butterflies and other wildlife can see/smell/find it.



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Wildlife/Pollinators

Consider not just food, but shelter and overwintering for all life stages.



But realize that non-natives may also need the same conditions.

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Plant Selection

Collect lists of native plants for your conditions and goals and note what they have to offer.

- Catalogs
- Herbarium
- What's growing nearby

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Choosing Native Plants

- Select plant species that are in the mid to northern portions of their range to combat climate change (especially for trees)
- Avoid purchasing plants from sources farther north
- Remember it's not only climate and temperatures; soil type, pH, moisture, etc. all matter and determine if a plant can migrate



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Plant Selection

When you acquire your plants, shop local. Local ecotypes may be better suited to your area.

Local experts can help.



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Plant Selection

Start speaking Latin!

Use botanical names to be sure you have the right plants.



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Plant Selection – Visual Design

Inventory what you have and what you want.

List each plant's design characteristics:

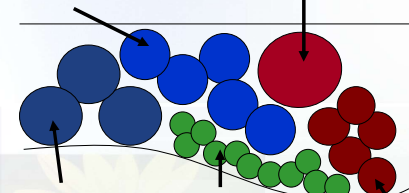
- Plant type
- Plant size
- Plant form (overall, flowers)
- Plant Texture (foliage/flowers)
- Plant Season of Interest (color, wildlife food)

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Combining Plants

Evergreen shrub, 4' X 4',
mounded, coarse texture,
winter interest

Deciduous shrub, 6' X 6',
upright, medium texture,
fall interest



Deciduous shrub, 2½' X 5',
creeping, medium texture,
spring interest

Herbaceous perennial, 18" tall,
mounded, fine texture, summer
interest (red flowers)

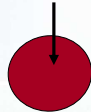
Ornamental grass, 40" tall,
upright, medium texture,
fall interest

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MATCHING PLANTS

Emerald Elf Amur Maple
Regent Serviceberry
Glossy Black Chokecherry
Spreading Cotoneaster
Beach Plum
Compact American Cranberrybush
Emerald Triumph Viburnum
Diablo Ninebark

Deciduous shrub, 6' X 6',
upright, medium texture,
fall interest

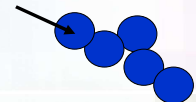


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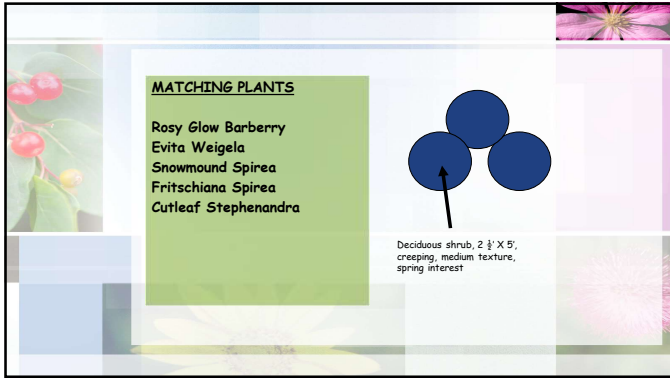
MATCHING PLANTS

Birdsnest Spruce
Dwarf Norway Spruce
Dwarf Balsam Fir
Aglo Rhododendron
Dwarf Yew

Evergreen shrub, 4' X 4',
mounded, coarse
texture, winter interest

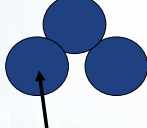


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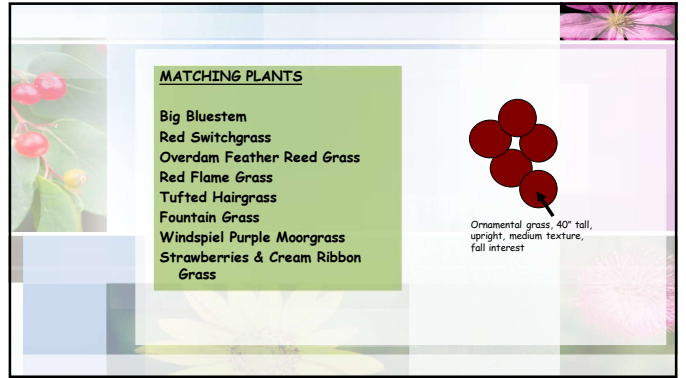
MATCHING PLANTS

- Rosy Glow Barberry
- Evita Weigela
- Snowmound Spirea
- Fritschiana Spirea
- Cutleaf Stephanandra



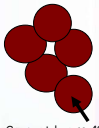
Deciduous shrub, 2 1/2' X 5',
creeping, medium texture,
spring interest

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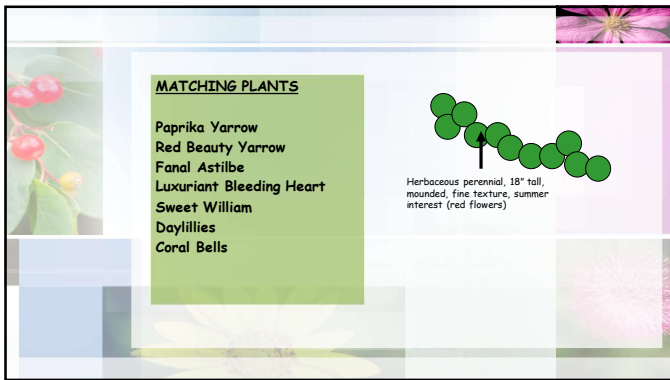
MATCHING PLANTS

- Big Bluestem
- Red Switchgrass
- Overdam Feather Reed Grass
- Red Flame Grass
- Tufted Hairgrass
- Fountain Grass
- Windspiel Purple Moorgrass
- Strawberries & Cream Ribbon Grass




Ornamental grass, 40" tall,
upright, medium texture,
fall interest

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MATCHING PLANTS

- Paprika Yarrow
- Red Beauty Yarrow
- Fanal Astilbe
- Luxuriant Bleeding Heart
- Sweet William
- Daylilies
- Coral Bells



Herbaceous perennial, 18" tall,
mounded, fine texture, summer
interest (red flowers)

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The Perfect Landscape

Natives and non-Natives can live happily together, if growing conditions are appropriate!

With planning, you can have the look as well as the environmental benefits you want!




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