

Gardening For a Better Planet

Home Landscaping as Habitat



In this talk...

- ◆ **Why changing how we garden matters**
- ◆ **What is a native plant?**
- ◆ **Right plant, right place**
- ◆ **Best practices for gardening like an ecosystem**
- ◆ **Q & A**

Who are we gardening for?

- ◆ **Old thinking: our gardens are for our enjoyment**
- ◆ **New thinking: our gardens are where we show care for our community, human and otherwise**

Who are we gardening for?

- ◆ **270 different species of bees (plus the nonnative honeybee)**
- ◆ **771 different species of moths and butterflies**
- ◆ **292 different species of birds**

What is a native plant?

- ◆ “Native plants are species that have no known history of importation and **have lived in a place long enough to develop the particular relationships with other species** that constitute the working of nature”
(From *Climate Wise Landscaping* by Sue Reed and Ginny Stibolt)

Why does planting natives matter?

Native plants have evolved relationships with pollinators and other organisms over thousands of years



USFWS

Why does planting natives matter?

- ◆ **Native plants → Insects → Birds, etc.**
 - ◆ **Many species of moths and butterflies are very host specific**
 - ◆ **Most baby birds are fed insects**



Doug Tallamy/Audubon.org

Why does planting natives matter?

- ◆ **Nativars: cultivated versions of native plants**
 - ◆ Significant changes to leaf color, flower may limit pollinator use
 - ◆ Grown from cuttings, genetically identical



Kingsbrae Garden

Right plant, right place

- ❖ **Native plants are in the right place!**
- ❖ **Matching a plant's needs to site conditions is key**
- ❖ **Planting younger = better adaptability**

Native plants for sunny areas

Eastern red columbine (*Aquilegia canadensis*):

loved by hummingbirds, blooms in May, likes dry soil, will self-seed readily (and easy to plant by seed!)



Native plants for sunny areas

Butterflyweed (*Asclepias tuberosa*):

host plant for monarchs, dry soils (clay soil version available), blooms July-August



Native plants for sunny areas

Black chokeberry (*Aronia melanocarpa*):

white flowers in May, birds eat the berries in summer, lovely fall foliage, tolerant of range of soil types



Native plants for partly sunny areas

Wild geranium (*Geranium maculatum*):

spreads to form nice groundcovers,
foliage looks nice after blooming, May-June



Native plants for partly sunny areas

Golden Alexanders (*Zizia aurea*):

food for Black Swallowtail butterflies,
late spring blooms last a while, can
handle heavy clay soils



Native plants for partly sunny areas

New England aster (*Aster novae-angliae*):

late season nectar source for butterflies,
medium to moist soils, plant something
else around base



Native plants for partly sunny areas

Serviceberry/shadbush (*Amelanchier canadensis*):

Early bloomer, can reach 20', prefers moist soils, fruits are edible and loved by birds, great fall color



Native plants for shady areas

Foamflower (*Tiarella cordifolia*):

great for shade gardens, foliage looks nice after blooming, needs rich soil



Native plants for shady areas

Wild blue phlox (*Phlox divaricata*):

Blooms May-June, very adaptable,
attracts hummingbirds



Native plants for shady areas

Witherod (*Viburnum cassinoides*):

native viburnums are critically important for migrating birds, good fall foliage, resistant to VLB



Best practices: spring clean up

- ◆ **Spring clean up only when it is consistently over 50 degrees during the daytime**
 - ◆ **Cut stems to 8-24"**
 - ◆ **Chop and drop**

Best practices: fall clean up

- ◇ Fall clean up
 - ◇ Leave dead plants standing
 - ◇ Seed heads for the birds, stems/leaf litter for nesting insects
 - ◇ Winter interest





WINTER

Leave dead flower stalks in-tact over the winter.

How to Create Habitat for Stem-nesting Bees

Image credit: Heather Holms

SPRING

Cut back dead flower stalks leaving stem stubble of varying height, 8 to 24 inches, to provide nest cavities.



Female bees find cut or naturally-occurring open stems, start a nest, then lay an egg on the pollen balls. Larvae eat the pollen.



FALL



WINTER



Bees hibernate in stems during the winter.



SUMMER

New growth of the perennial hides the stem stubble.

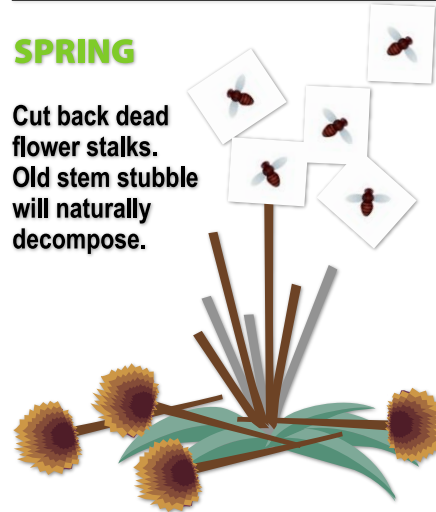


Bee larvae develop in cut dead stems during the growing season.



SPRING

Cut back dead flower stalks. Old stem stubble will naturally decompose.



Adult bees emerge and start nests in newly cut dead stems or in naturally-occurring open stems.



Best practices: mulch

- ◆ **Use groundcover plantings as “living mulch”**
 - ◆ **Allow groundcovers to grow together over time**
 - ◆ **Ex. Wild strawberry, wild ginger, sedges, ferns, etc.**

Best practices: water

- ◆ **Many native plants are very drought tolerant**
- ◆ **Water regularly during 1st growing season, as needed in 2nd season**
- ◆ **Deep, slow watering is preferable (drip hoses, water in the morning)**

Best practices: fertilizer

- ◆ **Right plant, right place**
- ◆ **Rethink “good soil”**
- ◆ **Native plants are adapted to Maine soils (sandy, lean, etc.)**
- ◆ **Chop and drop: returns nutrients to soil slowly**

Lawns in the US

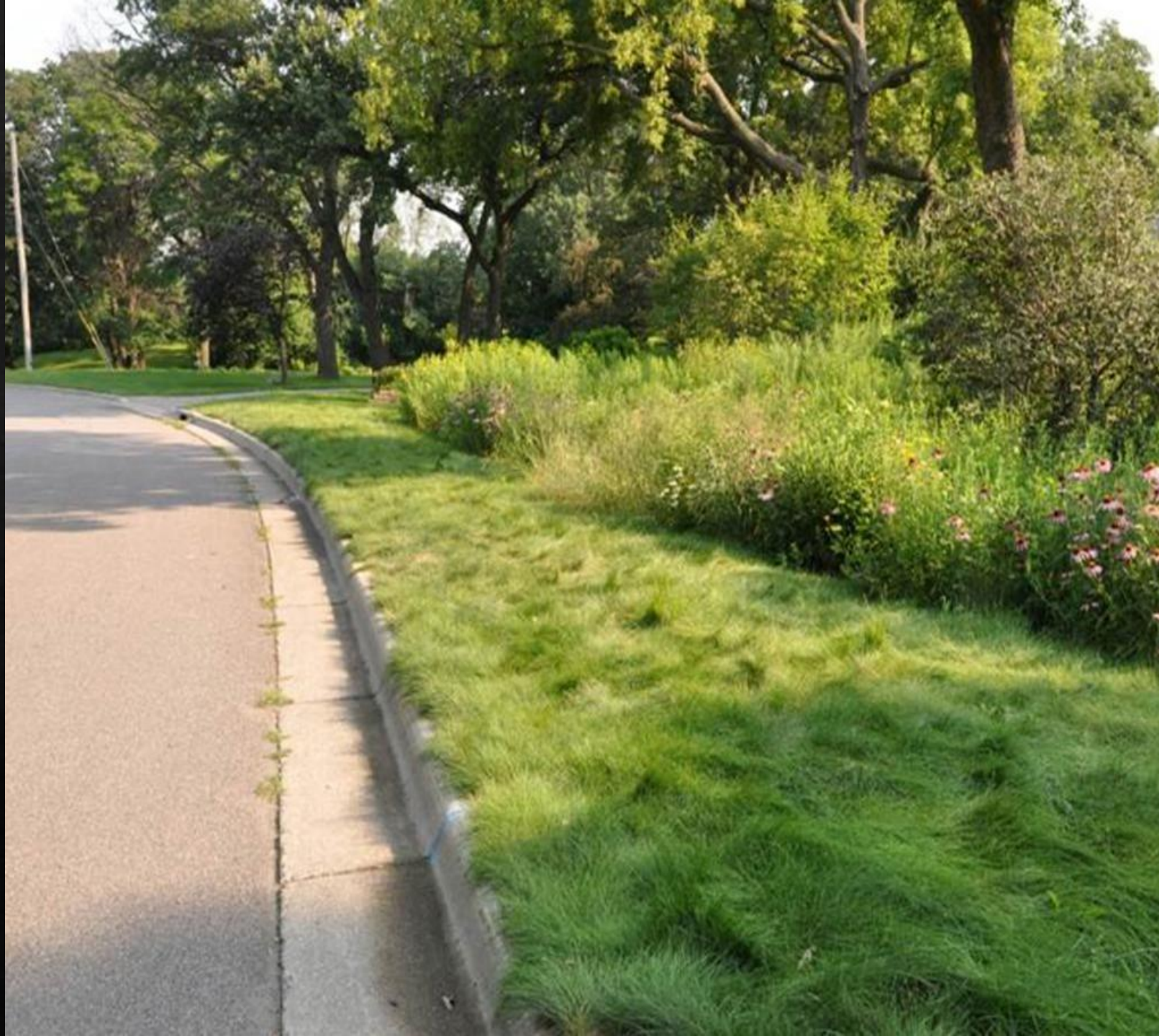
- ◆ **Largest single crop, takes up 40-50 million acres (40% residential)**
- ◆ **Most irrigated crop in the US (60 million acre-feet per year)**
- ◆ **1 hour of mowing = driving 100 miles**

Best practices: lawn care

- ◆ **How much do we really need? “Green carpet”**
- ◆ **Aerating and dethatching > fertilizers**
- ◆ **Mow to 3.5” inches or higher**
- ◆ **Leave clippings in place**
- ◆ **Allow for summer dormancy**

Best practices: lawn care

- ◇ **Lawn alternatives:**
 - ◇ **“Low mow” grasses**
 - ◇ **Pennsylvania sedge (part shade)**



Embrace a
new
aesthetic



Got more questions?

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Additional resources

- ◆ Native Plant Trust (formerly NEWFS)
- ◆ Ecological Landscape Alliance
- ◆ Coastal ME Botanical Gardens (Certificate in Native Plants & Ecological Horticulture)
- ◆ Homegrown National Park (Doug Tallamy)
- ◆ Maine Native Plant Finder (Audubon)