

Gardening 101: Planning your Garden

An introduction to gardening to support humans and biodiversity



Agenda

- Meet your instructors
- Review basic plant needs
- Plant and garden placement
- Sources for garden plants
- Protecting plants from pests
- Q&A

Meet your instructors

- Corey Barr
 - WCG Board Member
 - Grows exclusively in containers on a deck
 - Leads invasive plant removal efforts on Watertown-Cambridge Greenway with WCG
- Linda Relson
 - WCG Board Chair
 - Grows ecologically beneficial plants for biodiversity
 - Grew herbs for reception centerpieces and gifts

Why garden?

- Grow fresh, healthy produce
- Support local ecosystems
- Reduce your carbon footprint
- Great for relaxation, connecting with nature
- Great activity for kids!



Basic plant needs

- Sunlight
- Water
- Air
- Nutrients
- Space



Sunlight



- Hours of direct sun (approx.)
 - 6-8 = full sun
 - 3-6 = part sun/part shade
 - <3 = shade
- Morning sun is not as hot as afternoon sun
- Varies across seasons
 - Sun is lower in the sky in winter
 - Tree leaves
- Most vegetables require full sun (6-8 hours of direct sunlight)
- Native plants vary - some need full sun, others prefer partial shade

Watering

- Crucial for vegetables
 - Particularly when they are producing fruits and vegetables
- Crucial for transplanted plants
- Native plants are usually more drought tolerant and require less frequent watering *once they are established*
- Consider installing rain barrels



Soil moisture

- More moisture
 - Near downspouts, drippy gutters
 - Low spots, hold water after rain
- Drier soils
 - Graded ground, water runs off
 - Gardens absorb rain, replenish groundwater
 - Garden “Islands” in center of or near hardscape

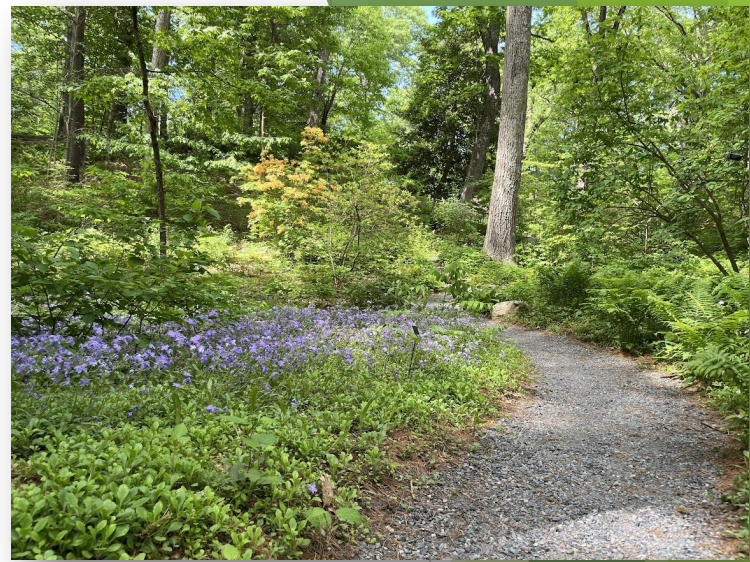


How does a rain garden work?



Soil conditions

- Vegetables prefer well-draining, fertile soil with a pH of 6-7
- Compost for soil amendment
- Native plants often thrive in less-fertile soil, adapting to local conditions
- Species dependent
 - Do your research



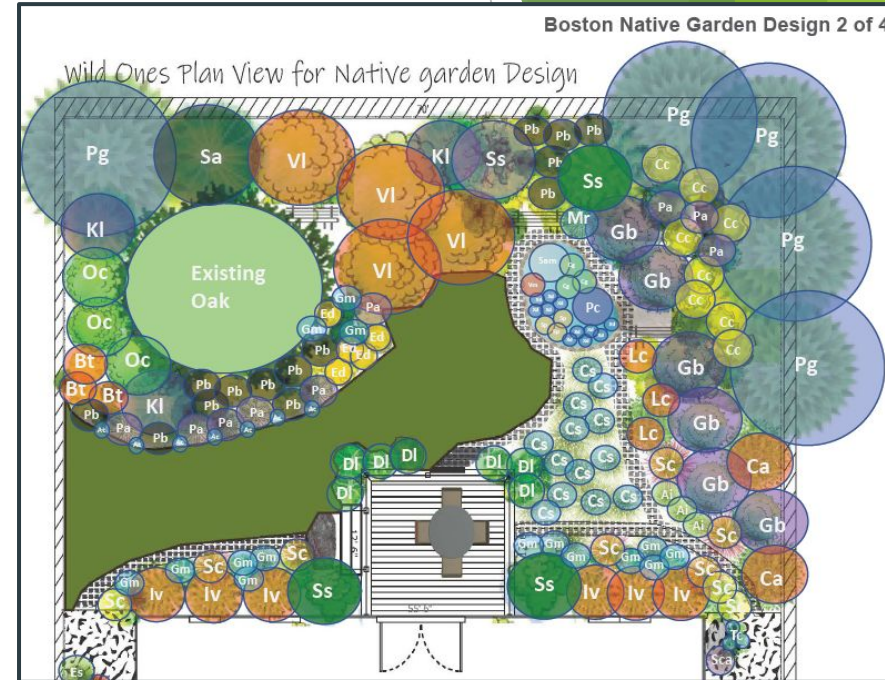
General Garden Spacing

- Consider how big a plant will be when it is mature
- Benefits of proper spacing
 - Improved air circulation
 - Reduced competition for nutrients
 - Better pest management



Native Plant Spacing

- Plants benefit wildlife, not mulch
- Bees need many flowers for forage
- Nature is dense, and collaborative
- Hiding places for wildlife
- Planting in layers
 - Short / Groundcover
 - Medium
 - Tall



Adaptability of Plants

Quite adaptable

Not adaptable

	Full sun	Part Sun	Shade	Dry soil	Average soil	Moist soil
Calico aster (<i>Symphotrichum lateriflorum</i>)	x	x	x	x	x	x
Carolina rose (<i>Rosa carolina</i>)	x	x		x	x	x
Northeast beardtongue (<i>Penstemon hirsutus</i>)	x	x	x	x	x	x
Birds foot violet (<i>Viola pedata</i>)	x			x		
Steeplebush (<i>Spiraea tomentosa</i>)	x	x				x



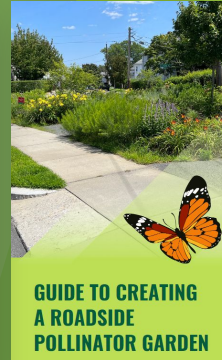
Roadside gardening

Plants must be tolerant of:
















- Poor soil nutrition
- Compacted soil
- Dry soil
- Road salt exposure

Recommendations:

- Butterfly milkweed
- Foxglove beardtongue
- Little bluestem



Drought- and Salt-Tolerant Native Plants For Your Roadside Pollinator Garden

FULL SUN		
 BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA)	 BLACK-EYED SUSAN (RUDECKIA HIRTAE)	 LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)
 FARROW MILKWEED (ACHILLEA MILEFOLIUM)	 FOXGLOVE BEARDTONGUE (PENSTEMON DIGITALIS)	 DOWNY GOLDENROD (SCIRPUS PUBERULA)
 SPOTTED BEEBALM (MONARDA PUNCTATA)	 CANADA ANEMONE (ANEMONE CANADENSIS)	 WILD STRAWBERRY (FRAGARIA VIRGINIANA)
PART SUN PART SHADE		
 RED COLUMBINE (AQUILEGA CANADENSIS)	 PURPLE LOVEGRASS (SISYRINCHIOS SPECTABILIS)	 WREATH GOLDENROD (SOLIDAGO CAESIA)
 CALICO ASTER (SYMPHYOTRICHUM LATIFOLIUM)	 NORTHERN DROOPSEED (SPOROBOLUS HETEROLEPIS)	 GOLDENROD (SOLIDAGO CAESIA)

Right Plant for the Right Place

- Match plants to their ideal conditions
 - Sunlight
 - Water
 - Nutrients
- Harsh urban environments

Container gardening

- Benefits
 - Space-saving and mobile - great for renters!
 - Reduced pests, diseases and weeds
 - Control over soil quality and water use



Container gardening

- Tips
 - Choose containers that are large enough for your plants
 - Make sure you have proper drainage holes
 - Avoid plants with deep tap root, such as sunflowers, Joe Pye Weed, etc.



Growing your own plants from seed

- Easy to try
- Seeds are cheap
- See plant through all its life stages
- Gift extra plants to friends, family



Germination codes

Seed packages will list a code specifying conditions needed to germinate

Examples:

- “C-30” for seeds that need 30 days of cold weather
 - “C-60”, “C-90” or “C-120”
- “A” ready to sow, no stratification required
- “D” sow on the surface, needs light



Seed packet example from Blue Stem Natives

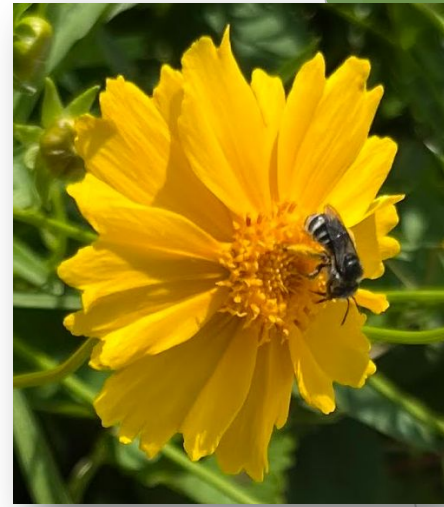
Easy-to-Grow Seeds!

Native plants

- Rudbeckia
- Coreopsis
- Partridge pea

Vegetables

- Tomatoes
- Cucumbers
- Lettuce
- Carrots
- Radishes
- Beans



Buying plants for your garden

- Look for places that use organic growing methods; avoid places like Home Depot and other more commercial sources
- Local farmers markets or farm stands in spring/early summer - good source for vegetable seedlings
 - Watertown Farmers Market
 - Willson Farms
 - Waltham Fields Community Farm
- Local gardening stores
 - Russell's
 - Blue Stem Natives
 - Native Plant Trust
 - Newton Community Farm
 - City Natives
 - Wild Seed Project

Check out other resources on our website!



Protecting plants from pests

- Rabbits!
 - Common in Watertown
 - New plants
 - Young plants
- Chicken wire / hardware cloth cages
 - Protect base of plant
- Aromatic foliage
 - Herbs
 - Monarda fistulosa
 - Anise hyssop
 - Mountain mint



Q&A

