

The background of the cover is a colorful illustration of a garden. In the foreground, a stone retaining wall borders a garden bed. The garden is filled with various plants, including yellow flowers, purple flowers, white flowers, and tall grasses. Several butterflies are shown flying around the plants. In the background, there are green hills and a blue sky with a few birds flying. The title 'NATIVE PLANTS FOR THE SMALL YARD' is written in large, bold, dark green letters at the top. Below the title, the subtitle 'Easy, Beautiful Home Gardens that Support Local Ecology' is written in a purple, cursive font. At the bottom, the author's name 'BY KATE BRANDES' is written in white, bold, sans-serif letters. At the very bottom, the text 'Lehigh Gap Nature Center's Landscaping for Communities and Wildlife Program' is written in a smaller, black, sans-serif font.

NATIVE PLANTS FOR THE SMALL YARD

*Easy, Beautiful Home Gardens
that Support Local Ecology*

BY
KATE BRANDES

Lehigh Gap Nature Center's Landscaping for Communities and Wildlife Program

NATIVE PLANTS FOR THE SMALL YARD:

Easy, Beautiful Home Gardens that Support Local Ecology

by Kate Brandes



Landscaping *for* Communities *and* Wildlife

LGNC's Landscaping for Communities and Wildlife Program was generously funded by the Lehigh Valley Community Foundation. This project was also completed in partnership with the Lehigh Valley Greenways Conservation Landscape. Funding was provided in part by a grant from the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, Environmental Stewardship Fund, administered by Delaware & Lehigh National Heritage Corridor.

Special thanks to the Program's Steering Committee:

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FORWARD

Why This Book?

Social scientists have looked at how people feel about their yards. Research shows that people's preferences are determined mostly by the desire to fit in with their neighbors.

Native plants have developed something of a bad rap among many homeowners as messy and hard to manage plants that do not fit in with the neighborhood. But there are many beautiful native plants that not only fit well into a residential yard, but also provide multiple benefits. This book features ideas and recommendations for these native plants that will work well in a flower garden or home landscaping project, especially for the resident with the small yard.

The use of native plants at home is a feature of this book because these plants are known for their ecological benefits (see page 3) but they are also a valuable resource for many other reasons, including:

- **Less need for herbicides and pesticides** — resulting in a healthier yard for your family and pets. Native plants co-exist with nature rather than competing against it, so they're often easier to maintain than nonnative species.
- **Reduction of storm water runoff and increased rainwater absorption** — wet-loving plants can dramatically increase water infiltration on your property. This also helps improve water quality in your community.

- **Beauty made easy** — native plants have a more subtle color pallet that mimics nature, so they look naturally beautiful and unified to our eye when grouped together. Choosing a wide assortment of plants also ensures seasonal interest, with the bonus of attracting colorful birds and butterflies.
- **Keeping it local** — many people support the local food movement. Native plants are a keystone species for

growing local food since so many pollinators depend on native plants to survive.

- **Sense of place** — Nature, which inherently includes native plants, gives people a sense of place. These plants are tied to the landscape and culture of our local area.



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What Will You Find Here?

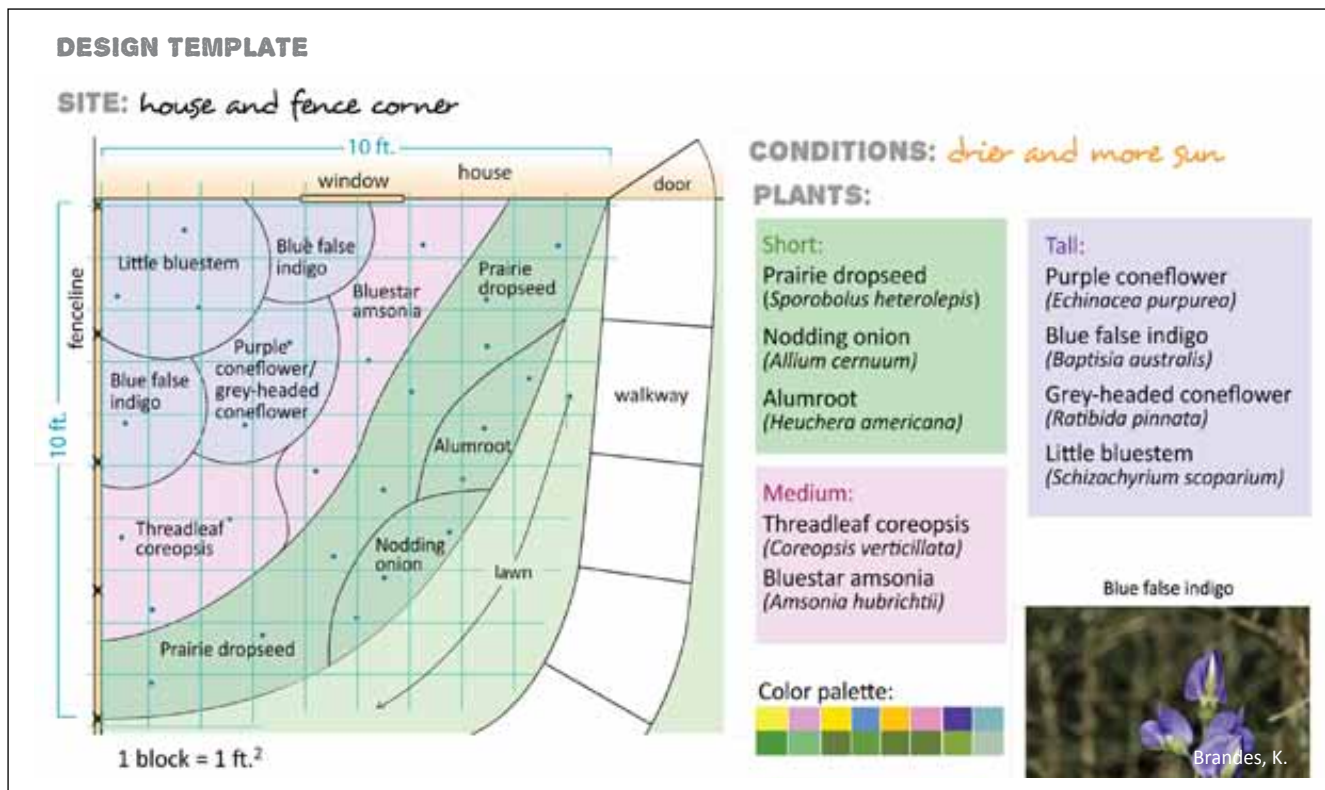
This book includes:

- A description of the connection between native plants and local ecology;
- Guidance on flower garden designs for your yard, including nine different design templates you can use and/or modify as you wish;
- Advice on installing and maintaining a flower garden;
- Information on the best native plants for small spaces, as well as visual guides for common yard weeds and invasive plants.

Use this book if you're interested in beautiful gardens that are easy to manage and beneficial to the health and well being of your family, community, and local environment.



Brandes, K.



Brandes, K.

INTRODUCTION

There are many options for using native plants in a residential yard, even a small one. This book provides practical examples for how to include native plants in your landscape that look nice, are easy to care for and also support the local ecology. In fact, this book is designed especially for the resident with a small yard.

Most of us have seen examples of native plants in larger gardens, as either:

1) Wild areas, or



2) Highly managed gardens at destination botanical gardens.



But there are many choices for the home gardener to include natives in ways that blend into the neighborhood and do not require a team of gardeners to maintain.



Native plants may seem like a new fad, but they've always been around and have a history in our yards. Perennial beds, as they were designed decades ago, often included natives. But many of these native perennials and shrubs have been lost from the modern yard.



Native plants are not only beautiful, but they're part of the local ecosystem and serve a vital role in the lives of local fauna including nearly all birds and butterflies. The plants and their pollinators are also a fundamental part of our food chain.



Why Natives Are Important in a Yard:

THE ECOLOGICAL CONNECTION



Pollinators depend on native plants!

At least one third of the world's food supply is dependent on pollinators. Aside from the well-known honeybee there are thousands of species of native bees, wasps, moths, butterflies and other insects in North America that are important for pollination of our food. These native pollinators depend on native plant species for survival.

Doug Tallamy, a professor of entomology and wildlife ecology at the University of Delaware, has studied the role of native plants extensively. His findings show that native plants support local insects that also serve as the basis of our food chain. Non-native plants are not part of this food chain. For example, Dr. Tallamy has determined that most species of native caterpillars rely on native plants. In keeping with the idea of a food chain, many birds then rely on those caterpillars. In fact, Dr. Tallamy and his students have recorded the number of caterpillars needed to feed a clutch of chickadee hatchlings. One nest of baby birds requires 350 to 570 caterpillars every day, depending on how many chicks there are. So, an incredible 6,000 to 9,000 caterpillars are required to raise one clutch of chickadees^[1] to adults. Almost all baby birds require insects like caterpillars to grow, even birds that mature into seed-eaters. As Dr. Tallamy explains, what we plant in our landscapes determines what can live in our landscapes.

A native plant occurs naturally in the place where it evolved. These plants have an evolutionary connection to our area and support healthy local ecosystems, strengthening the natural food chain where we live.



¹Tallamy, Douglas W. *Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens*. Timber Press, 2007.

A special note on invasives:

Ornamental plants that are non-native, such as lilacs or daffodils, can be lovely in your garden. But there are certain invasive, non-native species that cause harm to the environment, economy, or human health. These robust plants thrive and that's part of the reason they are sometimes marketable ornamental plants and also why they persist in nature. They should be avoided in our yards since they often spread to places they don't belong. For a list of invasives in your area, please see: Invasivespeciesinfo.gov. And for drawings of some of the most common invasive plants found in yards, see Appendix B (page 37).



Virginia sweetspire (*Itea virginica*) is an excellent replacement for the invasive Japanese barberry.

Deer avoid certain scents

Deer eat a wide variety of plants, especially when there's a large population. They have been known to eat anything if they're hungry enough. That said deer rely on their sense of smell to select desirable plants and tend to avoid many plants with aromatic foliage. So if you're trying to keep deer away, consider choosing plants with a scent and placing them in your yard, particularly around the perimeter, as a way to keep deer out. Plants that are known to be deer resistance are noted in Table 1 (page 41).

Replacing Common Invasive Ornamentals with Similar Natives

COMMONLY SOLD INVASIVES	NATIVE ALTERNATIVE(S)	FEATURES OF NATIVE
Bradford Pear	Redbud, Native Dogwoods, Shadbush	Small trees with spring bloom
Bamboo	Eastern red-cedar	Dense, evergreen foliage; privacy
Japanese or Chinese Wisteria	American Wisteria	Similar to nonnative, but not invasive
Burning Bush	Highbush blueberry or Winterberry	Brilliant fall color; edible fruit Bright-red berries in winter
Butterfly Bush	Sweet pepperbush	Attract butterflies with flowers
Japanese Barberry	Virginia sweetspire	Scented flowers and nice fall color
Privet	Bayberry	Glossy foliage can be pruned to hedge
Purple Loosestrife	Blazing-star Joe-pye weed	Spikes of purple flowers in summer Purple flowers attract butterflies Attracts pollinators
Periwinkle	Golden groundsel, Barren strawberry Creeping phlox, Green and gold	Attractive groundcover

DESIGNING A GARDEN

Your garden should suit your tastes and lifestyle. Here we offer some ideas you can take from and modify to whatever best serves you. When considering a new flower garden or adding to one you already have, here are a few things to keep in mind:

- Start small. You don't have to convert your whole yard to native plants. Instead try introducing native plants little bits at a time. It's more economical and this approach will let you get to know each plant well.
- Try a more informal garden, which requires less maintenance. By informal we mean more natural looking as compared to a formal Italian-style garden.
- Curved garden edges have an organic feel and are also easier to maintain than sharp edges.
- Keep things simple – especially in a

small space. A mix of just a few plants or colors looks better than a lot of different things all at once.

- Plant a swath or mass of the same plant together. This is the way plants grow in nature and so this kind of planting looks right to our eye when we see it in a garden space.
- Include layers of plants, with varying heights, so that the ground is ideally covered with plants. This reduces or eliminates the need for the addition of mulch over time since the plants provide their own green mulch once they grow in. Weeds often establish on bare soil, so the idea is to cover the ground with the plants you want and crowd out the ones you don't. This kind of planting will also help the soil naturally retain moisture, and prevent erosion. If you let plants die back in place you'll also feed the soil.

Start small and keep it simple. Informal = less maintenance.

Container gardens are a good way to start small and to give you the opportunity to get to know each plant.



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DESIGN TEMPLATES

For examples of the ideas described above, we've created some templates you can use to design your garden space. These templates include native plants that work especially well in small spaces. You can also mix other ornamentals in if you like.

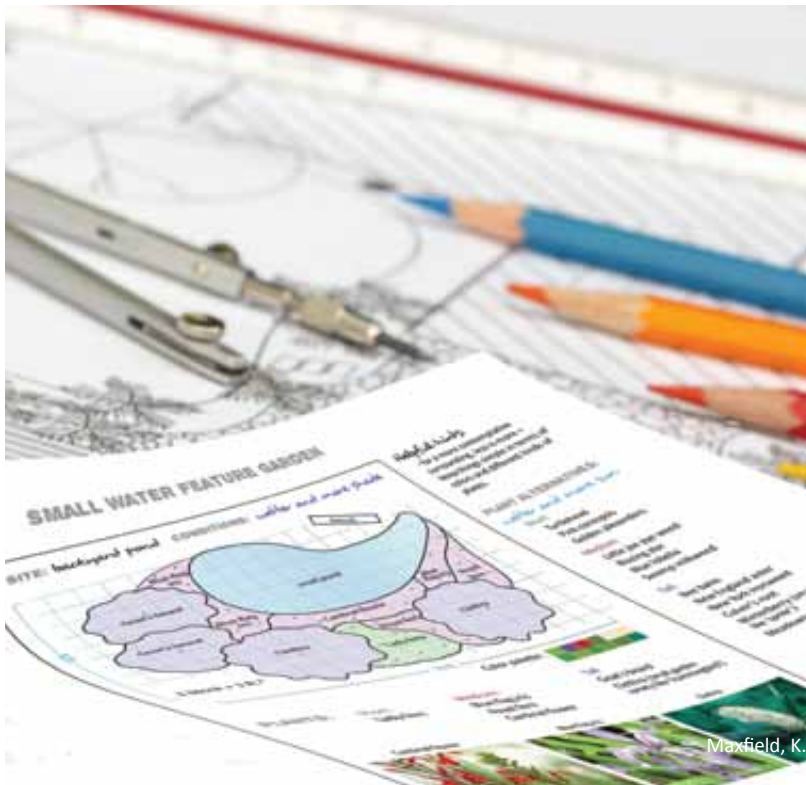
Take ideas from each template. Use them as is or modify them anyway you wish. They can be tailored to your garden space, needs, and preferences.

In general the designs feature taller plants in the back and short and medium plants up front. This doesn't mean you shouldn't experiment with some of the taller plants in the middle ground or up front. Some irregularity in the garden keeps it interesting.

These templates were developed for some common areas in small yards. There's also a container garden example in case you have no yard. The designs include the following:

- Corner Garden
- Mailbox Garden
- Small Water Feature Garden
- Container Garden
- Downspout Garden
- Rock Wall Garden
- Front Porch Garden
- Sidewalk Strip Garden
- Back Patio Garden

Each one is overlaid on a grid so you can expand or contract the design to meet the dimensions of your own space. Recommended spacing between plants is shown by the dots on the template. Most of these designs have plant suggestions for the following four conditions: sunnier and wetter, sunnier and drier, shadier and wetter, and shadier and drier. The rain gutter garden template is for both sunny and shady wet options. The designs for containers, the rock garden, and sidewalk strip have options for sunny and shady dry conditions.



In addition, Table 1 on page 41 lists many of the native plants that could work in a small space. These plants are listed by size (short, medium, tall) and by their preferred growing conditions, so you can easily substitute one of those plants for something in the templates if you're looking for another color, texture, or a specific plant.

If you're planning your own garden design, it helps to do a quick drawing of the space that is roughly to scale. All you need is graph paper and a pencil. Place the larger plants first (shrubs and plants that are taller and wider). Then add smaller plant material to fill in.



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Sample Template Design:

site conditions

plant areas (color-coded to indicate height)

garden dimension

scale of gridded blocks

leaf and bloom colors

featured plants with botanical names

photo samples

10 ft

16 ft

1 block = 1 ft.²

SITE: backyard pond CONDITIONS: wetter and more shade

small pond

bench

Color palette:

PLANTS:

Short:
Lady fern
(*Athyrium filix-femina*)

Medium:
Blue flag iris
(*Iris versicolor*)
Royal fern
(*Osmunda regalis*)
Cardinal flower
(*Lobelia cardinalis*)

Tall:
Goat's beard
(*Anemone dioica*)
Clethra (small variety)
(*Clethra alnifolia* 'Hummingbird')

Cardinal flower

Blue flag iris

Clethra

Best Natives for Small Spaces

There are so many natives to choose from when considering your garden design. Here are ten of the best for a smaller yard (see Table 1 on Page 41 for ideal growing conditions).

- **Alumroot** (*Heuchera americana*)
- **Maidenhair fern** (*Adiantum pedatum*)
- **Clethra** (small variety such as 'Hummingbird') (*Clethra alnifolia*)
- **Purple coneflower** (*Echinacea purpurea*)
- **Penstemon** (*Penstemon digitalis*)
- **Ginger** (*Asarum canadense*)
- **False Blue indigo** (*Baptisia australis*)
- **Amsonia** (*Amsonia hubrichtii*)
- **Little blue stem** (*Schizachyrium scoparium*)
- **Phlox** (*Phlox paniculata*)



Clethra



False Blue indigo



Purple coneflower



Amsonia



Alumroot



Penstemon



Little blue stem



Maidenhair fern



Ginger



Garden phlox

CORNER GARDEN

Every yard has at least one corner, which can be made more beautiful and welcoming with the addition of flowers and interesting foliage.



CORNER GARDEN

Helpful hints:

- Consider planting attractive gardens in places that are visible from the windows of your home.
- Plant along fences to make your yard look more spacious. Plants will soften the boundary line and make it look less severe.
- Make sure plants growing under windows are low enough that they won't grow over the window.
- Select plants based on the sun and moisture conditions you have.

SITE: house and fence corner

CONDITIONS: drier and more sun

PLANTS:

Short:

- Prairie dropseed (*Sporobolus heterolepis*)
- Nodding onion (*Allium cernuum*)
- Alumroot (*Heuchera americana*)

Medium:

- Threadleaf coreopsis (*Coreopsis verticillata*)
- Bluestar amsonia (*Amsonia hubrichtii*)

Tall:

- Purple coneflower (*Echinacea purpurea*)
- Blue false indigo (*Baptisia australis*)
- Grey-headed coneflower (*Ratibida pinnata*)
- Little bluestem (*Schizachyrium scoparium*)

Color palette:

1 block = 1 ft.²

Threadleaf coreopsis

Purple coneflower

Grey-headed Coneflower

Blue false indigo

Marcus, Joseph

US Fish and Wildlife

CORNER GARDEN

PLANT ALTERNATIVES:

drier and more shade

Short:

Green and gold
(*Chrysogonum virginianum*)Alumroot
(*Heuchera americana*)Allegheny pachysandra
(*Pachysandra procumbens*)

Medium:

Bottle brush glass
(*Elymus hystrix*)

Tall:

Sneezeweed
(*Helenium autumnale*)

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wetter and more shade

Short:

Maidenhair fern
(*Adiantum pedatum*)Solomon's seal
(*Polygonatum biflorum*)Canada anemone
(*Anemone canadensis*)Bleeding heart
(*Dicentra eximia*)

Medium:

Great blue lobelia
(*Lobelia siphilitica*)Royal fern
(*Osmunda regalis*)

Tall:

Goat's beard
(*Aruncus dioicus*)Clethra - small variety
(*Clethra alnifolia* 'Hummingbird')Black Cohosh
(*Actaea racemosa*)

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wetter and more sun

Short:

Pink Coreopsis
(*Coreopsis rosea*)Wild geranium
(*Geranium maculatum*)

Medium:

Dwarf foothergilla (small shrub)
(*Fothergilla gardenii*)Meadowsweet (small shrub)
(*Spiraea alba*)

Tall:

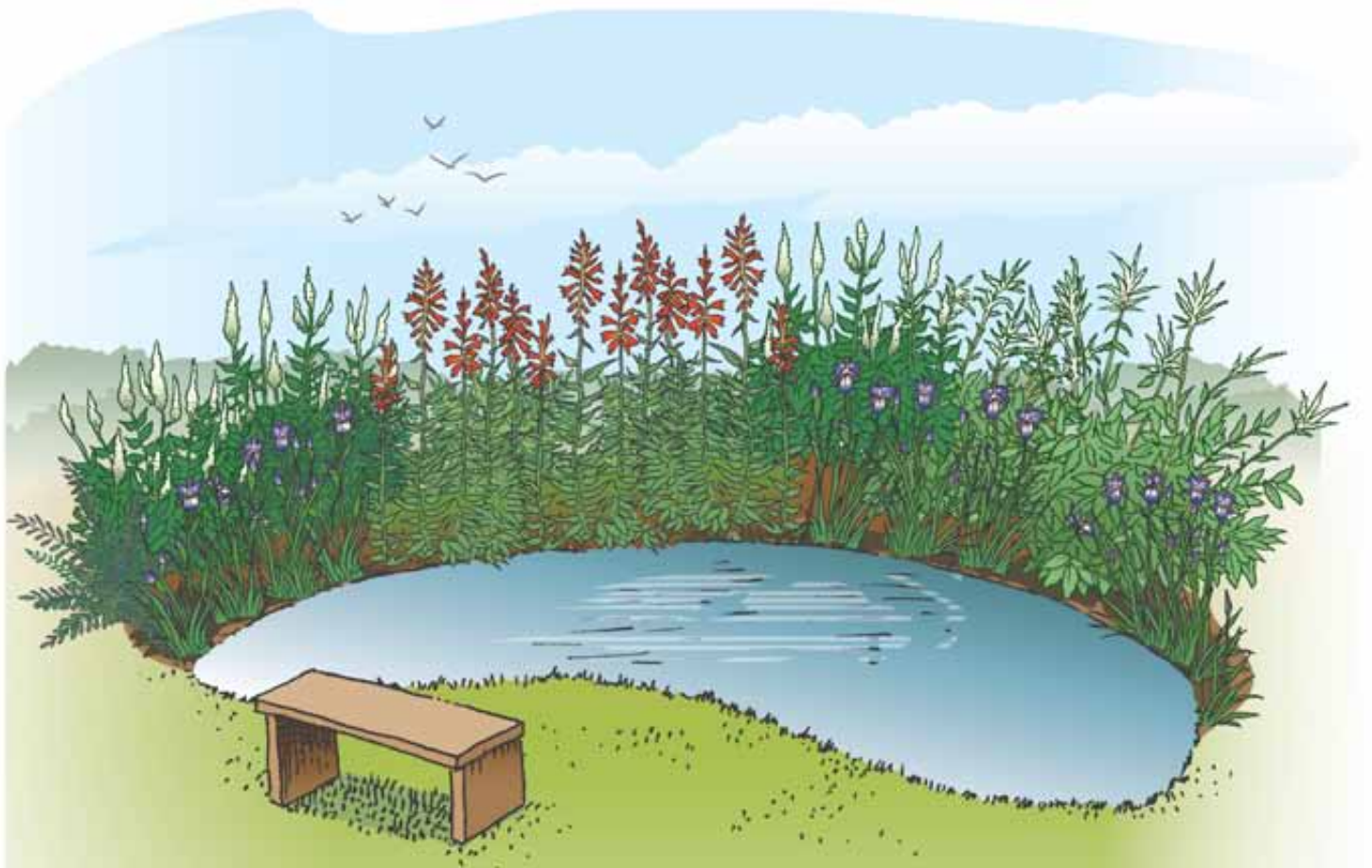
Sneezeweed
(*Helenium autumnale*)Blazing Star
(*Liatris spicata*)Garden Phlox
(*Phlox paniculata*)

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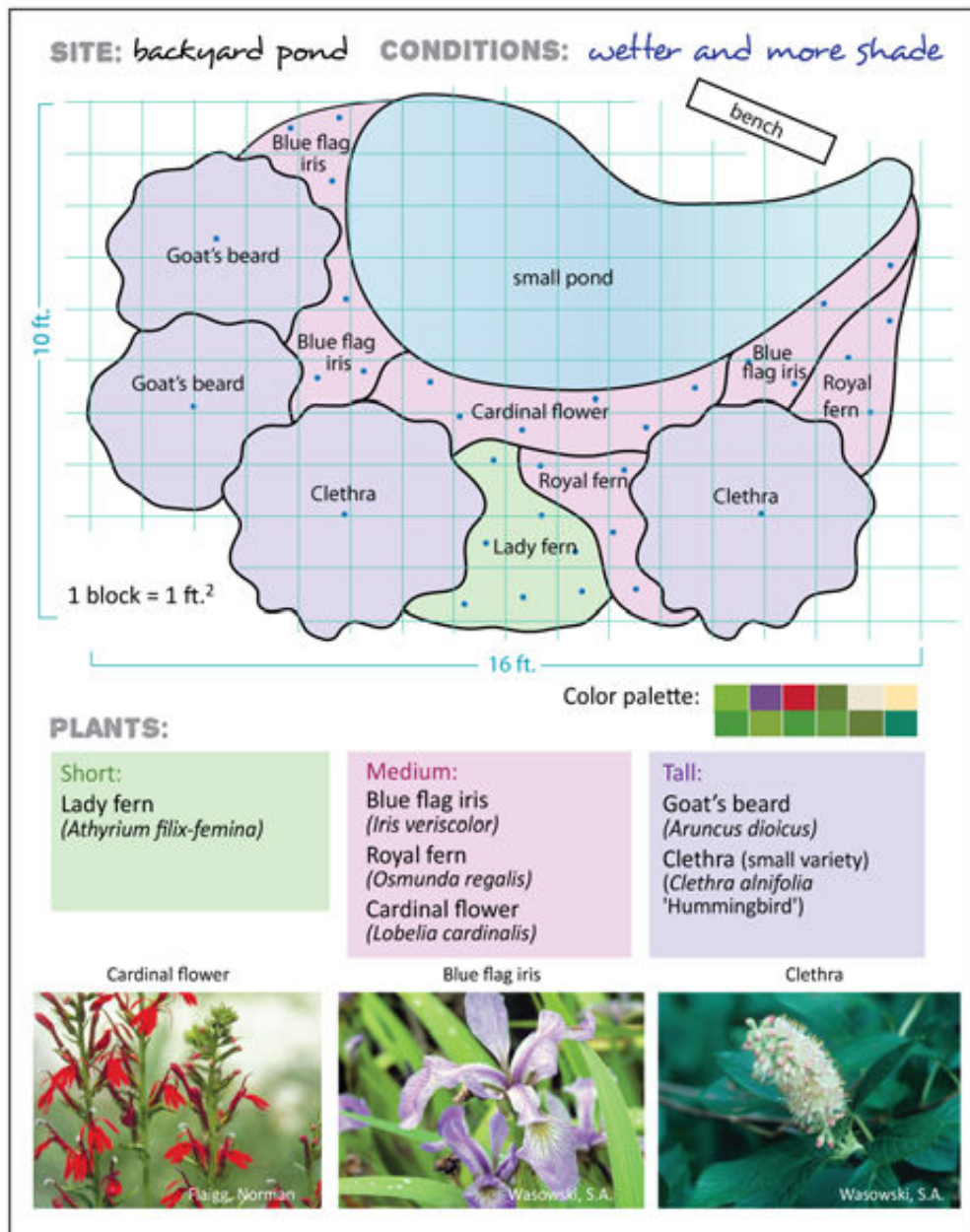
SMALL WATER FEATURE GARDEN

Flowing water is not only beautiful to admire, but the sound is very relaxing.

A water feature in your yard is likely to attract birds, as well as frogs and dragonflies. Planting natives around your water helps improve the local water quality.



SMALL WATER FEATURE GARDEN

**Helpful hint:**

- For a more contemplative surrounding, less is more – keep things simple in terms of colors and different kinds of plants.

PLANT ALTERNATIVES:

wetter and more sun

Short:

Turtlehead
(*Chelone obliqua*)
Pink coreopsis
(*Coreopsis rosea*)
Golden alexanders
(*Zizia aurea*)

Medium:

Little joe pye
(*Eutrochium dubium*)
Blazing star
(*Liatris spicata*)
Great blue lobelia
(*Lobelia siphilitica*)
Swamp milkweed
(*Asclepias incarnata*)

Tall:

Beebalm
(*Monarda didyma*)
New England aster
(*Symphyotrichum novae-angliae*)
New York ironweed
(*Vernonia noveboracensis*)
Culver's root
(*Veronicastrum virginicum*)
Winterberry (small variety)
(*Ilex verticillata* 'Nana' RED SPRITE)
Meadowsweet
(*Spiraea alba*)

CONTAINER GARDEN

A container garden can instantly add interest to any outdoor space.

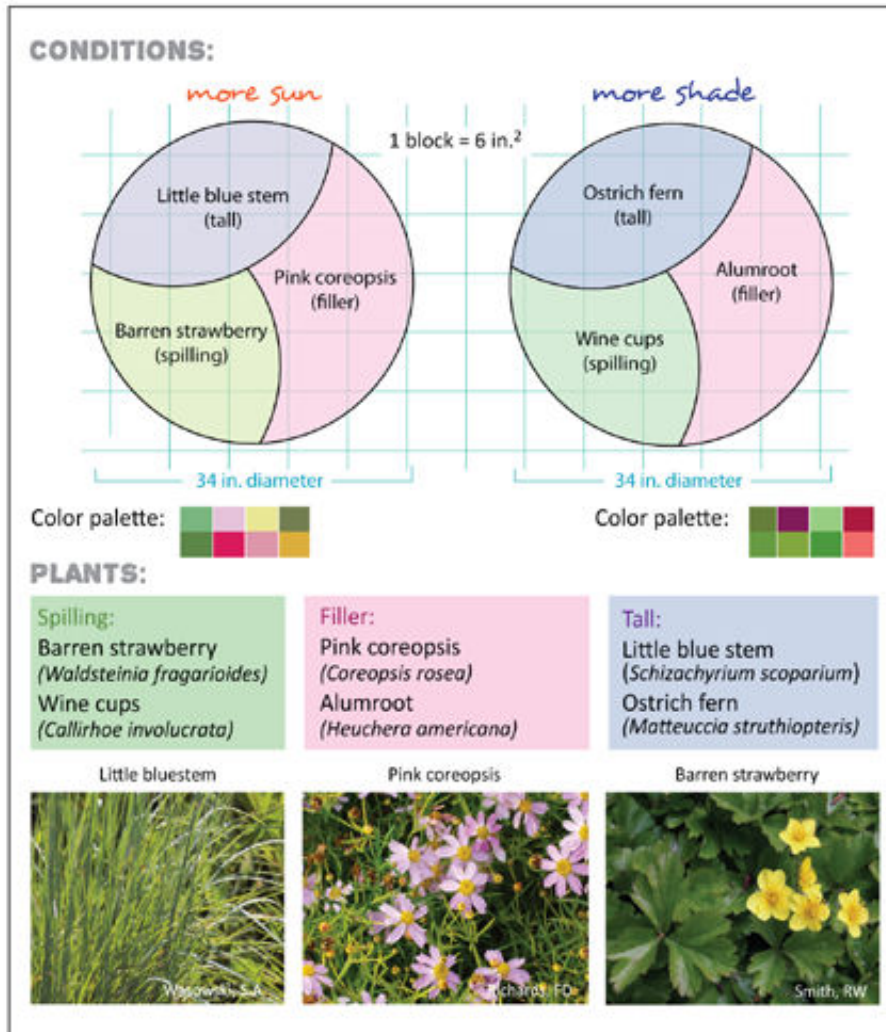
Container gardens are versatile for small yards, patios, decks and porches. They can be placed alone or in groups. Arrange containers close to your favorite outdoor spot so you can enjoy them. The color pallet of natives is often more subtle, like that found in nature. So it's easy to mix things together and have them look good.



CONTAINER GARDEN

Helpful hints:

- Containers are often planted with a tall plant, a plant that fills the pot and one that spills over the brim. These varying heights are attractive, but you can also use a single plant for good effect.
- Pots should have drainage holes in the bottom, be deep enough for root growth, and wide enough so that plants aren't crowded.
- Large pots work best, but make sure they aren't too heavy. Add wheels to pots to be able to move them around easily.

**PLANT ALTERNATIVES:**

(use alone or in combination)

more sun

Filler/Spilling:

Prairie dropseed (*Sporobolus heterolepis*)
Prickly pear cactus (*Opuntia compressa*)

Filler:

Nodding onion (*Allium cernuum*)
Dwarf crested iris (*Iris cristata*)
Snow flurry aster (*Symphotrichum ericoides*)

Tall:

Black-eyed susan (*Rudbeckia fulgida*)
Spotted beebalm (*Monarda punctata*)
Penstemon (*Penstemon digitalis*)
Garden phlox (*Phlox paniculata*)
Little lemon goldenrod (*Solidago 'Little Lemon'*)

more shade

Filler/Spilling:

Moss phlox (*Phlox subulata*)
Prickly pear cactus (*Opuntia compressa*)

Filler:

Maidenhair fern (*Adiantum pedatum*)
Stonecrop (*Sedum ternatum*)
Most heucheras

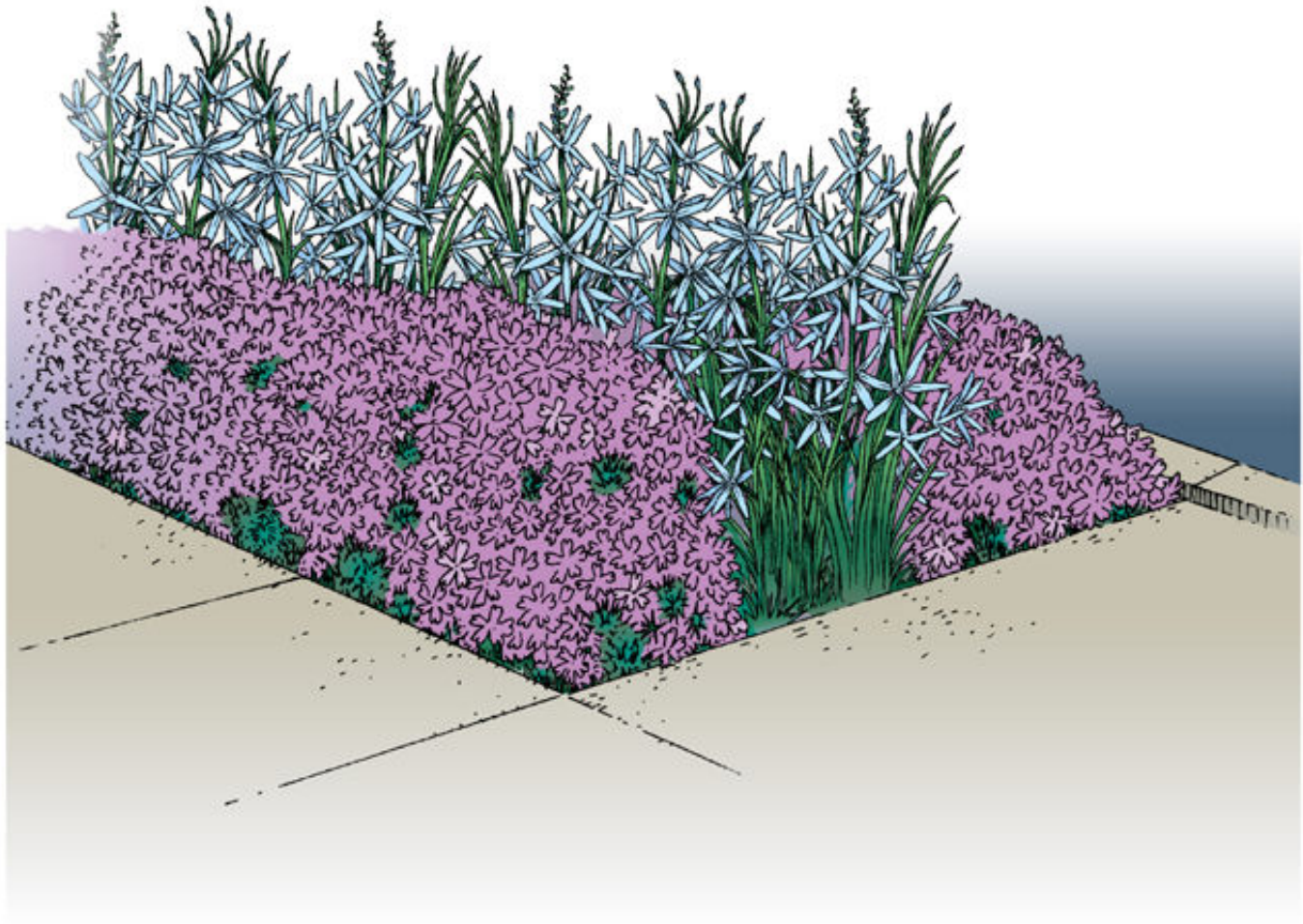
Tall:

Bottlebrush grass (*Elymus hystrix*)

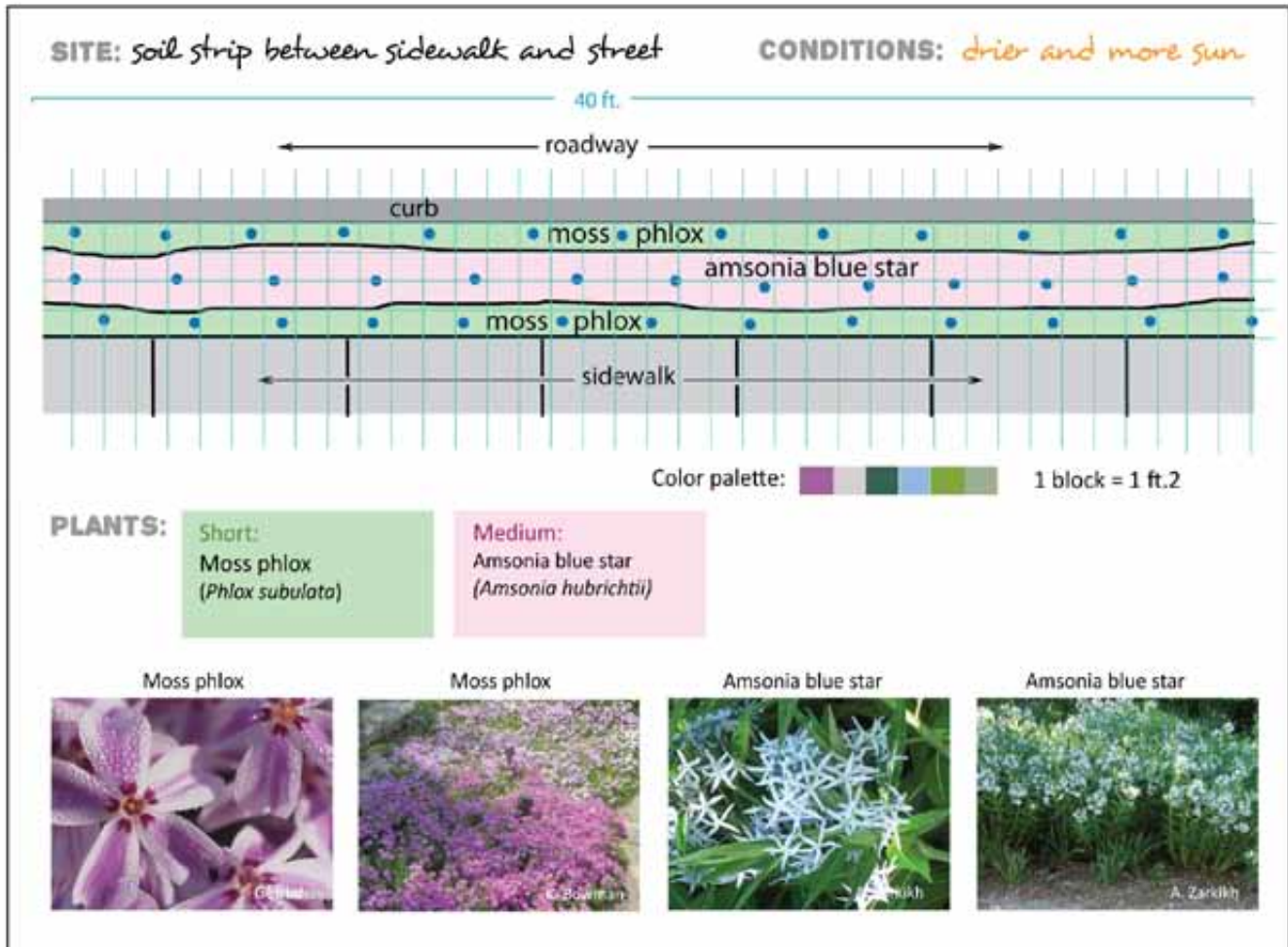
SIDEWALK STRIP GARDEN

The narrow strip of land between the sidewalk and street has a big impact on your home's curb appeal.

Here are some ideas to transform that strip into something that adds value to your home and benefits local wildlife.



SIDEWALK STRIP GARDEN



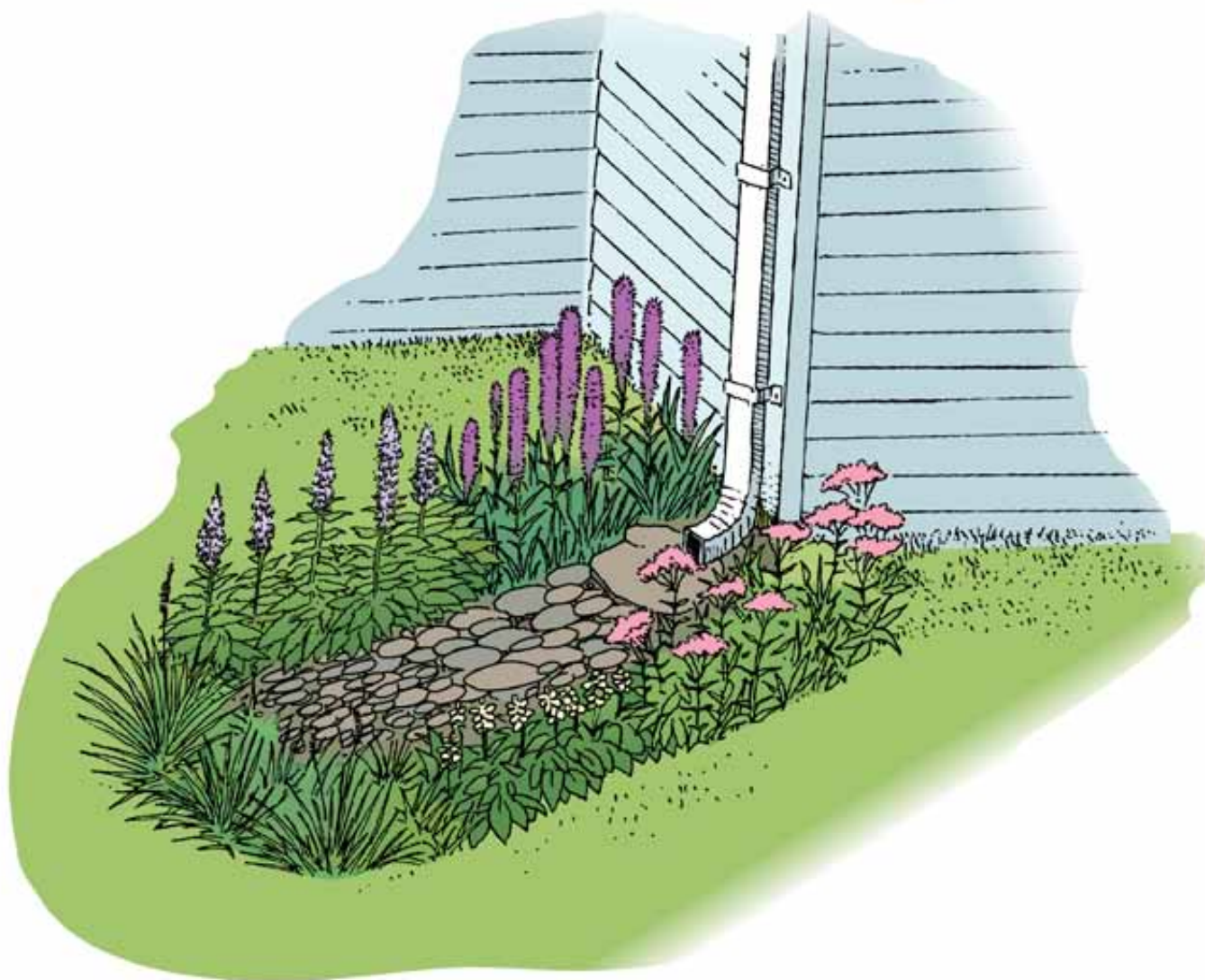
Note: The pavement strip (otherwise known as ‘the hell strip’) is hot in the summer and is salted in the winter, so not many plants can survive. Below are a few other natives (on the shorter side, for visibility issues) that could work in this area.

PLANT ALTERNATIVES:

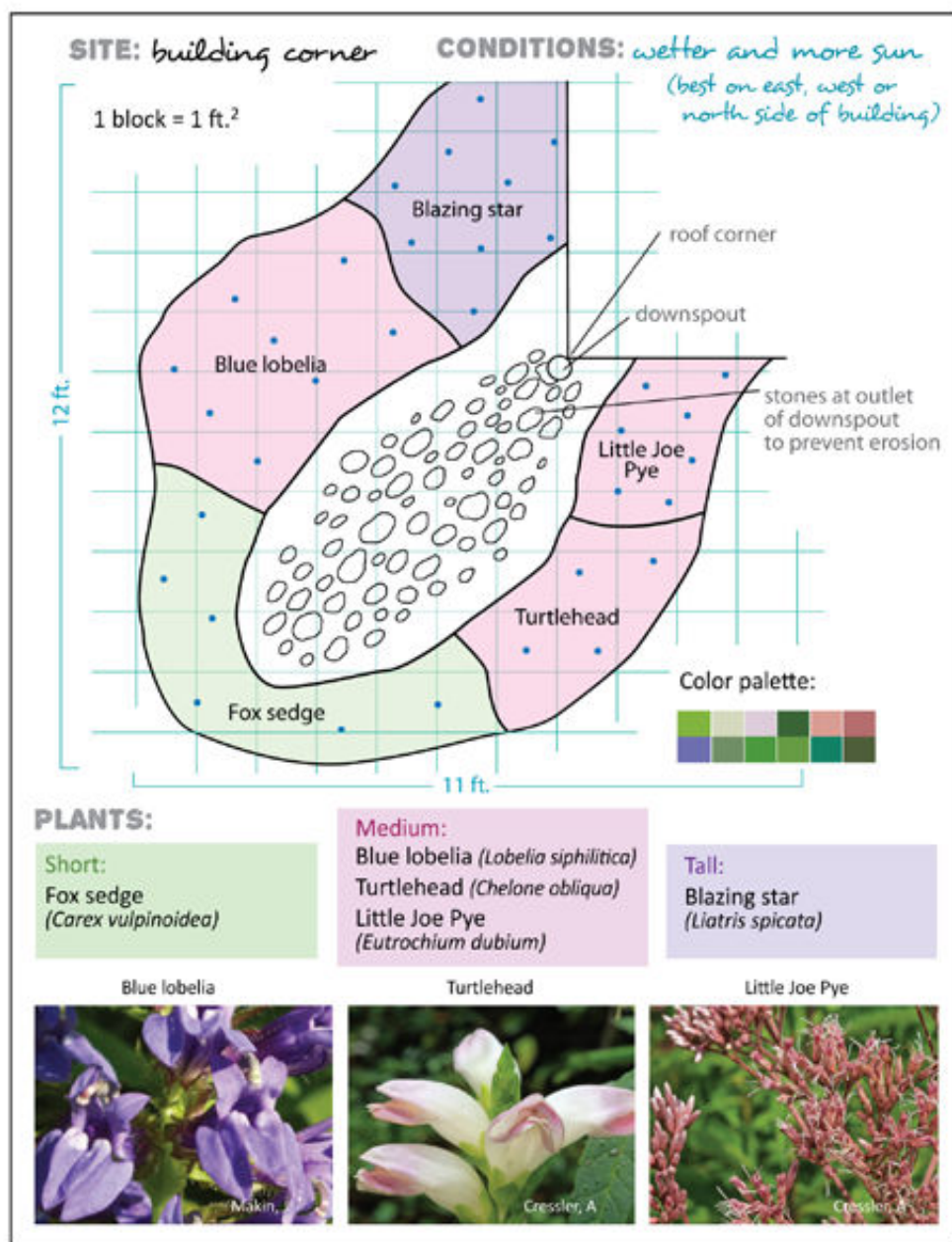
Short: Creeping juniper (<i>Juniperus horizontalis</i>) Stonecrop (<i>Sedum ternatum</i>)	Medium: Penstemon (<i>Penstemon digitalis</i>) Butterfly weed (<i>Asclepias tuberosa</i>)
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DOWNSPOUT GARDEN

The water runoff from your roof's downspout creates an opportunity to plant beautiful natives adapted to the fluctuating levels of moisture at a drainpipe. You can create a garden that will attract butterflies, bees, birds, and amphibians and also help rainwater absorb back into the ground instead of being diverted as waste.



DOWNSPOUT GARDEN



Helpful hints:

- Water should be directed away from the house foundation.
- Inspiration can come from local surroundings. Using native plants and even local stones in your yard creates harmony between your garden and the local area.

PLANT ALTERNATIVES:

wetter and more shade

Short:

- Maidenhair fern (*Adiantum pedatum*)
- Golden ragwort (*Packera aurea*)

Medium:

- Blue lobelia (*Labelia siphilitica*)
- Lady fern (*Athyrium filix-femina*)
- Royal fern (*Osmunda regalis*)

Tall:

- Goat's beard (*Aruncus dioicus*)
- Black cohosh (*Actaea racemosa*)

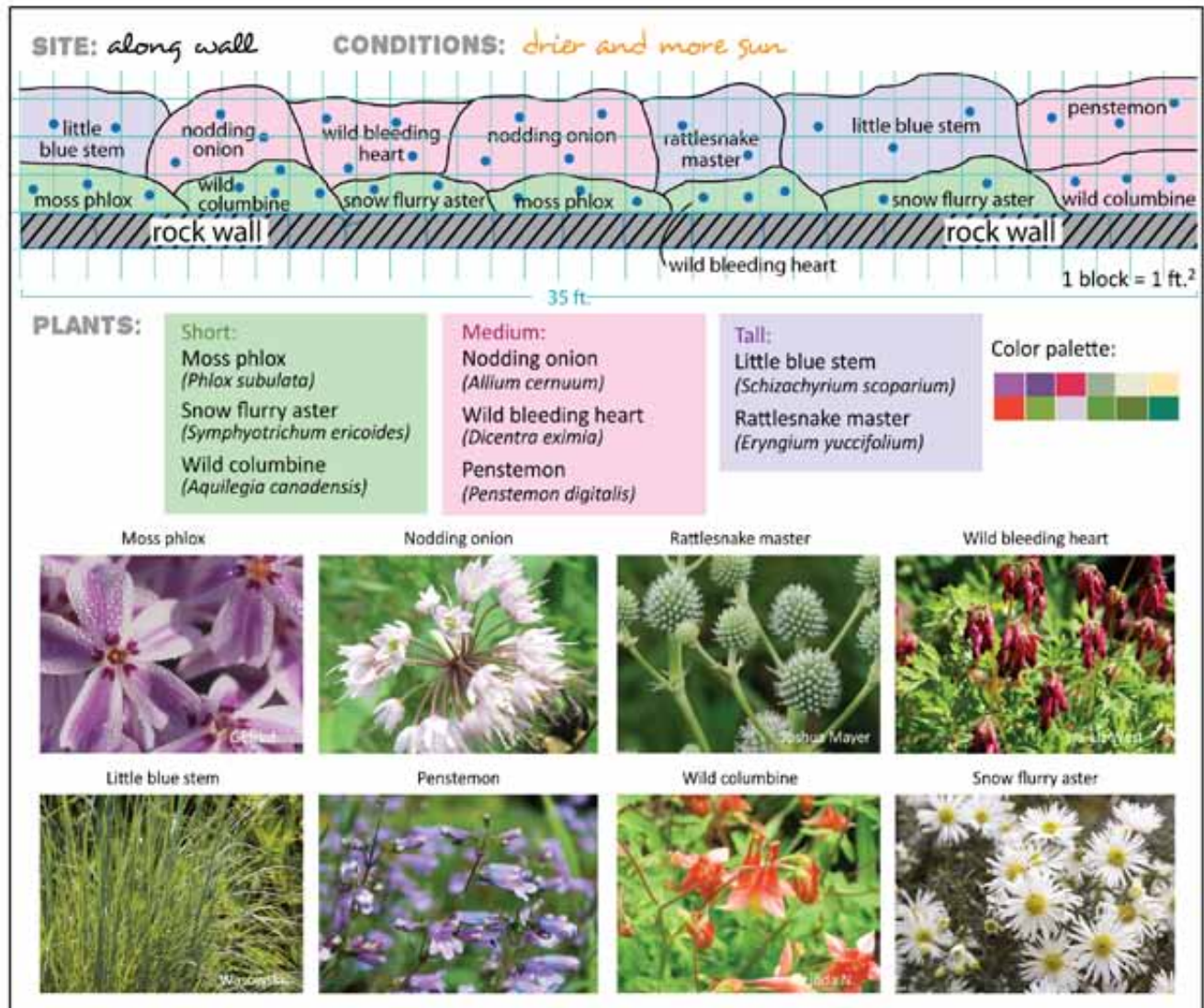
ROCK WALL GARDEN



A rock wall is a great spot to tuck in a whole garden full of drought-tolerant plants to creep, crawl and cascade over the rocks.



ROCK WALL GARDEN

**PLANT ALTERNATIVES:** drier and more shade

Short:	Medium:	Tall:
Golden alexanders (<i>Zizia aurea</i>)	Alumroot (<i>Heuchera americana</i>)	Tall bellflower (<i>Campanula americana</i>)
Green and gold (<i>Chrysogonum virginianum</i>)	Geranium (<i>Geranium maculatum</i>)	

MAILBOX GARDEN

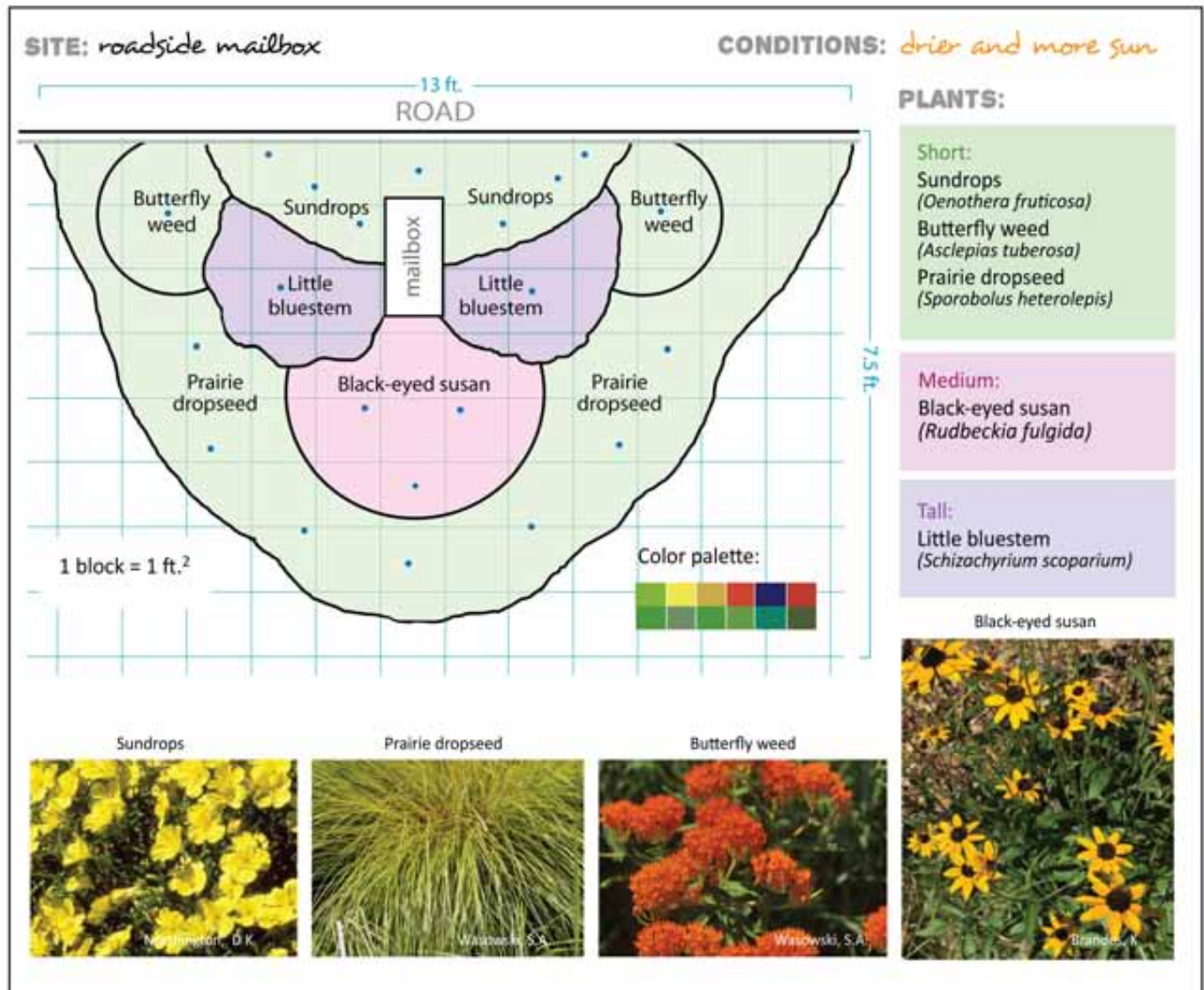
Dress up your mailbox with native perennials that will draw butterflies.



MAILBOX GARDEN

Helpful hints:

- Use plants that will tolerate and thrive in the conditions you have.
- Plant the big stuff first. Account for full size when planting and spacing. Then fill in with smaller plants.



MAILBOX GARDEN

PLANT ALTERNATIVES:

drier and more shade

Short:

- Canada anemone
(*Anemone canadensis*)
- Green and gold
(*Chrysogonum virginianum*)
- Alumroot
(*Heuchera americana*)

Medium:

- Golden Alexanders
(*Zizia aurea*)

Tall:

- Sneezeweed
(*Helenium autumnale*)

Golden Alexanders



wetter and more shade

Short:

- Maidenhair fern
(*Adiantum pedatum*)
- Canada anemone
(*Anemone canadensis*)
- Foam flower
(*Tiarella cordifolia*)

Medium:

- Lady fern
(*Athyrium filix-femina*)
- Royal fern
(*Osmunda regalis*)
- Golden Alexanders
(*Zizia aurea*)

Tall:

- Sneezeweed
(*Helenium autumnale*)

Swallowtail Butterfly



wetter and more sun

Short:

- Canada anemone
(*Anemone canadensis*)
- Pink Coreopsis
(*Coreopsis rosea*)
- Wild geranium
(*Geranium maculatum*)

Medium:

- Golden Alexanders
(*Zizia aurea*)

Tall:

- Blazing Star
(*Liatris spicata*)
- Garden Phlox
(*Phlox paniculata*)

Purple Blazing Star



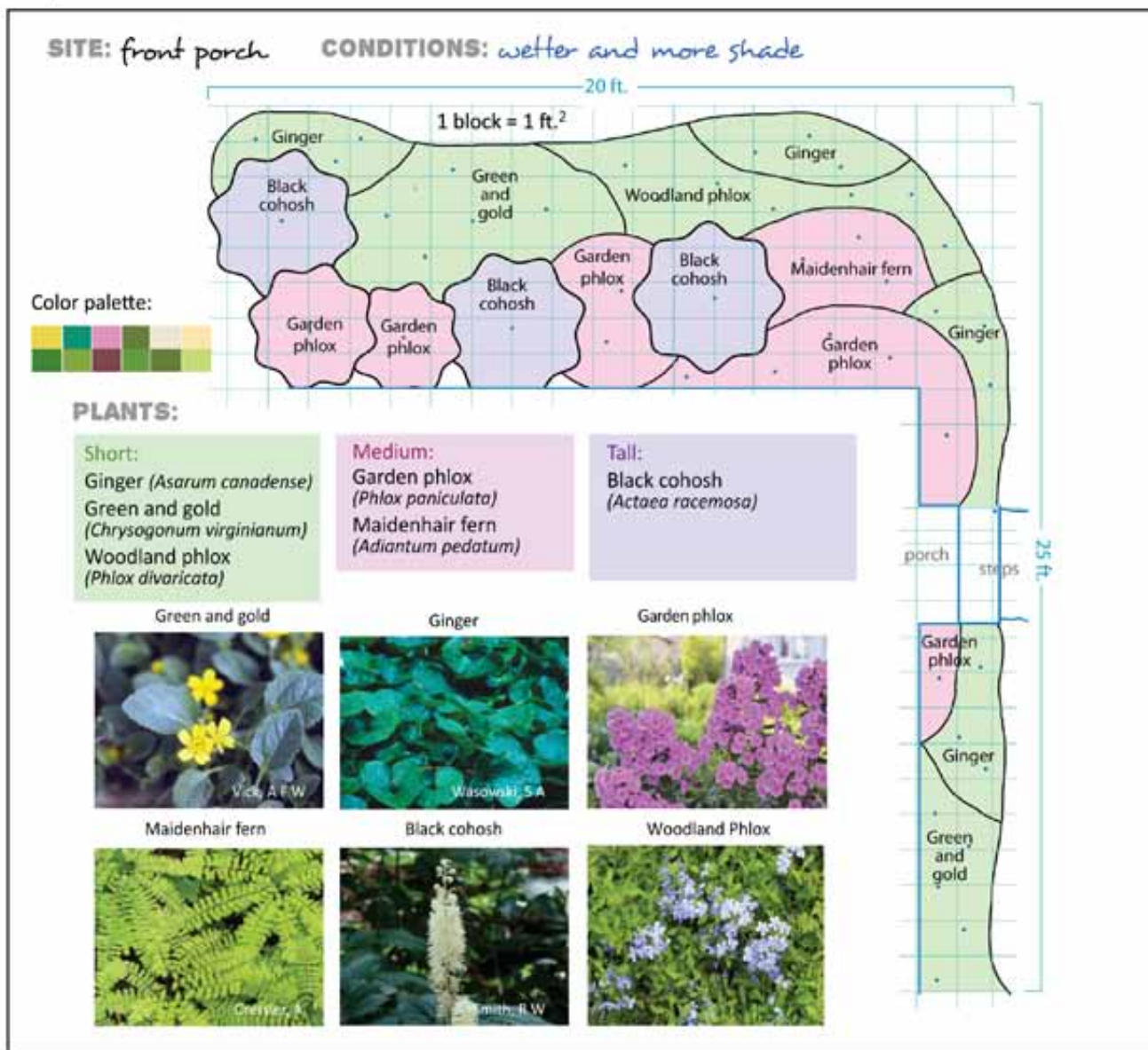
FRONT PORCH GARDEN

Gardens in the front of the house are often the ones we want looking the best since they are what most people see. Native plants can enhance the beauty of your home and landscaping.



FRONT PORCH GARDEN

Helpful hint: - Use plants that aren't so tall that they obscure the view from your porch.



FRONT PORCH GARDEN

PLANT ALTERNATIVES:

drier and more shade

Short:

Canada anemone
(*Anemone canadensis*)Green and gold
(*Chrysogonum virginianum*)Alumroot
(*Heuchera americana*)Allegheny pachysandra
(*Pachysandra procumbens*)

Medium:

Bottlebrush Grass
(*Elymus hystrix*)

Tall:

Sneezeweed
(*Helenium autumnale*)

Bottlebrush Grass



drier and more sun

Short:

Nodding onion
(*Allium cernuum*)Butterfly weed
(*Asclepias tuberosa*)Threadleaf coreopsis
(*Coreopsis verticillata*)Alumroot
(*Heuchera americana*)Sundrops
(*Oenothera fruticosa*)

Medium:

New Jersey tea (small shrub)
(*Ceanothus americanus*)Sweet fern
(*Comptonia peregrina*)Blue star amsonia
(*Amsonia hubrichtii*)Beardtongue penstemon
(*Penstemon digitalis*)

Tall:

Anise hyssop
(*Agastache foeniculum*)Blue false indigo
(*Baptisia australis*)Grey-headed coneflower
(*Ratibida pinnata*)Little bluestem
(*Schizachyrium scoparium*)

wetter and more sun

Short:

Canada anemone
(*Anemone canadensis*)Pink Coreopsis
(*Coreopsis rosea*)Wild geranium
(*Geranium maculatum*)

Medium:

Dwarf fothergila (small shrub)
(*Fothergilla gardenii*)Meadowsweet
(*Spiraea alba*)Swamp milkweed
(*Asclepias incarnata*)Great blue lobelia
(*Lobelia siphilitica*)

Tall:

Beebalm
(*Monarda didyma*)Cardinal flower
(*Lobelia cardinalis*)

Dwarf fothergila



BACK PATIO GARDEN

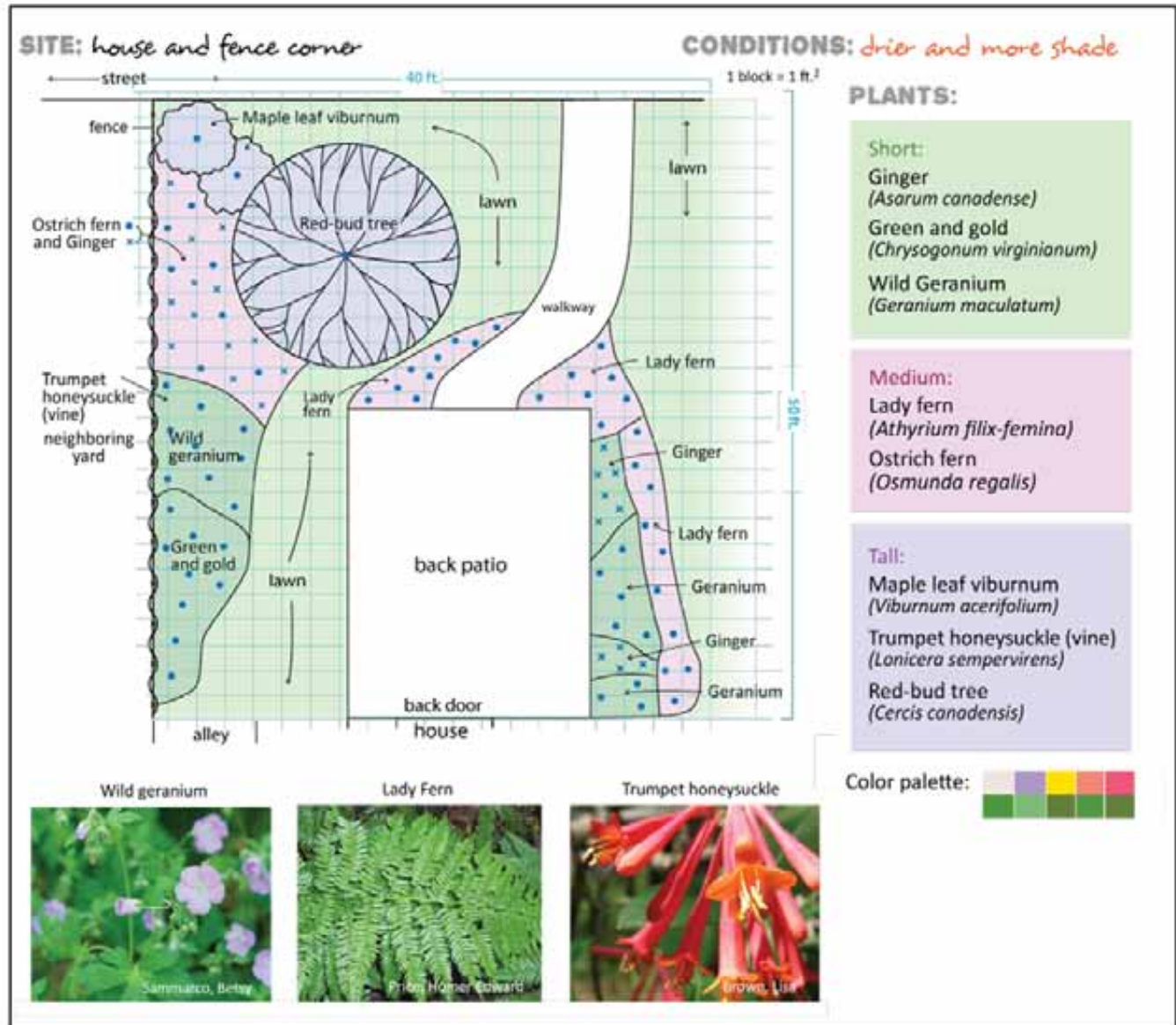
Backyards are often the places we relax and unwind. Lush gardens that draw in an array of birds and butterflies add to the allure of a backyard oasis.



BACK PATIO GARDEN

Helpful hints:

- Use a garden hose to lay out a natural looking garden border.
- For less weeding, use plants that grow in clumps.
- Massed plants that bloom at the same time will make a better showing. But you also want to incorporate other plants that bloom other times of the year.



BACK PATIO GARDEN

PLANT ALTERNATIVES:

drier and more sun

Short:

Moss phlox
(*Phlox subulata*)

Alumroot
(*Heuchera americana*)

Thread leaf coreopsis
(*Coreopsis verticillata*)

Medium:

Amsonia
(*Amsonia hubrichtii*)

Beardtongue
(*Penstemon digitalis*)

Black-eyed susan
(*Rudbeckia fulgida*)

Tall:

Little bluestem
(*Schizachyrium scoparium*)

New Jersey tea
(*Ceanothus americanus*)

Oak leaf hydrangea (small)
(*Hydrangea quercifolia* 'Pee Wee')

Blue false indigo
(*Baptisia australis*)

Red-bud tree
(*Cercis canadensis*)

wetter and more shade

Short:

Maidenhair fern
(*Adiantum pedatum*)

Green and gold
(*Chrysogonum virginianum*)

Canada anemone
(*Anemone canadensis*)

Golden Alexanders
(*Zizia aurea*)

Christmas fern
(*Polystichum acrostichoides*)

Ginger
(*Asarum canadense*)

Bleeding heart
(*Dicentra eximia*)

Medium:

Great Blue Lobelia
(*Lobelia siphilitica*)

Royal fern
(*Osmunda regalis*)

Bee balm
(*Monarda didyma*)

Tall:

Goat's beard
(*Aruncus dioicus*)

Black cohosh
(*Actaea racemosa*)

Clethra (small variety)
(*Clethra alnifolia* 'Hummingbird')

Sneezeweed
(*Helenium autumnale*)

Spice bush
(*Lindera benzoin*)

wetter and more sun

Short:

Canada anemone
(*Anemone canadensis*)

Pink Coreopsis
(*Coreopsis rosea*)

Wild geranium
(*Geranium maculatum*)

Medium:

Turtlehead
(*Chelone obliqua*)

Garden Phlox
(*Phlox paniculata*)

Bee balm
(*Monarda didyma*)

Cardinal flower
(*Lobelia cardinalis*)

Blazing star
(*Liatris spicata*)

Tall:

Joe-pye weed
(*Eutrochium dubium*)

Culver's root
(*Veronicastrum virginicum*)

Winterberry (small variety)
(*Ilex verticillata* 'Nana' RED SPRITE)

Dwarf fothergilla
(*Fothergilla gardenii*)

Serviceberry (tree)
(*Amelanchier canadensis*)

INSTALLING AND MAINTAINING THE GARDEN

If you're going to establish a new garden bed, you'll have to prep the area by removing the grass either by digging, tilling or smothering it. If you plan ahead, the easiest method is to begin in the early fall and lay down cardboard over the intended garden area, wet it, and cover that with a thick layer of leaf mulch and water again. By late spring you can plant into your new garden without doing anything more.

Once a garden bed is ready for planting (either one you've prepped or an existing one), the best times to plant are spring and fall.

It helps to place the larger plant material first (shrubs, grasses, big perennials). Leave enough space around them so that when they're fully grown they won't be crowded. Then fill in around the larger plant material with smaller plants.

Weeding is required even in the most well designed garden spaces. The key is to do a little, often. That way it doesn't get ahead of you. Once gardens are established, less weeding is needed. To help with identification, pictures of some of the common yard weeds are shown in Appendix A.

You might find some native plants at your local nursery. Purple coneflower and black-eyed susans are two of the most commonly available native perennials. You can also find native shrubs and trees. But there are many natives to choose from and in order to have the full selection available to you, visit a local nursery that specializes in these plants. For information on where to find these nurseries see the resource section on page 49.



Brandes, K.



Brandes, K.



Brandes, K.

Trading plants with a friend or neighbor is a very economical way to start incorporating natives into your garden. Consider that most of the plants included in this book can be shared. Perennials are easily divided. Participate in local perennial exchanges. Garden clubs are also great places to meet people with an interest in plants.

Allow your garden time to establish. It will take about three years to fully develop after it's planted. Shrubs will often take longer to reach maturity.

It's important to water new plants well until they get established (usually a few weeks). If plants are located in the growing conditions they prefer, extra watering won't be needed once they're established, except during very dry conditions.

Weeding is required, but as your garden fills in with the plants you want, less weeding will be needed.

You may choose to mulch your garden or actively weed until the new plants grow in fully. The quicker you cover the soil with plants or mulch, the better. Exposed soil = weeds.

Consider leaving plants in place to die back in the fall. This will help naturally feed the soil. Seed heads can be left if you're interested in plants reseeding and/or feeding the winter birds. Plants material that's left alone in the fall is easier for you, provides multiple benefits for wildlife, and enhances the textural interest of the winter landscape in your yard.

Here are five widely available native plants to look for at your nursery. Look for plant nurseries or mail order companies that specialize in natives to get access to a wider variety of native plants – there are many to choose from.

- Purple coneflower
- Black-eyed susan
- Garden phlox
- Winterberry
- Ninebark



Garden phlox



Winterberry



Purple coneflower



Black-eyed susan



Ninebark



Brandes, D.



Brandes, D.

APPENDICES AND TABLES

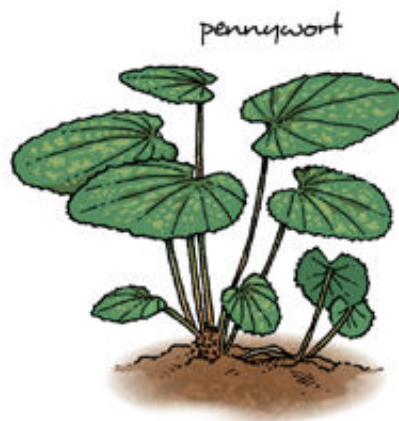
A. Common Weeds	34
B. Common Invasives	37
Native Plants (Table 1)	41
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Resources	49



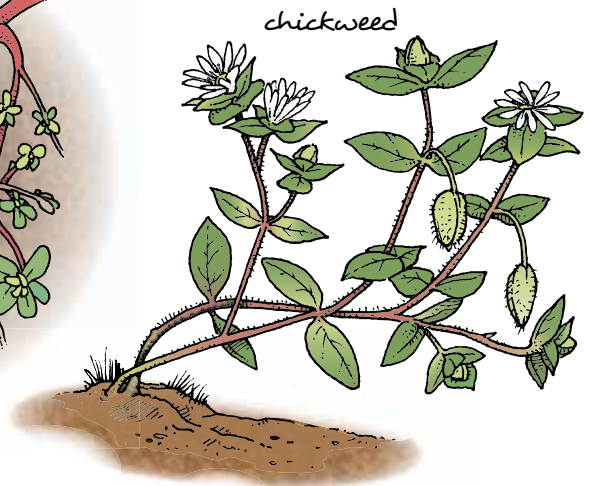
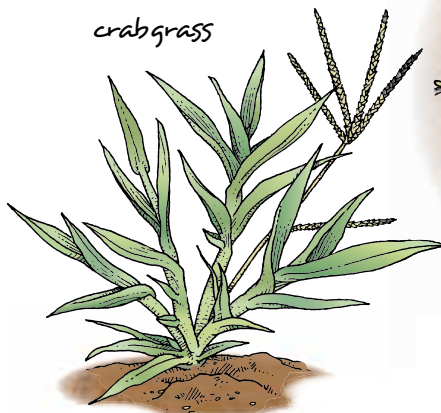
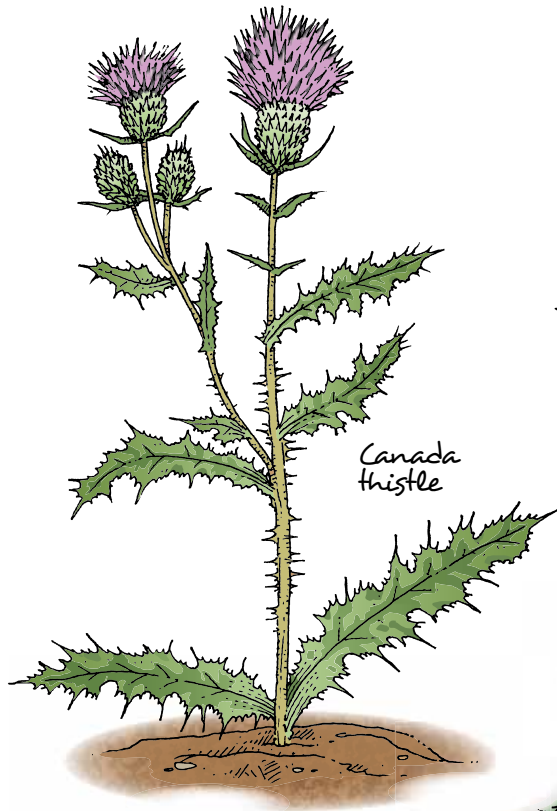
Brandes, K.

COMMON WEEDS

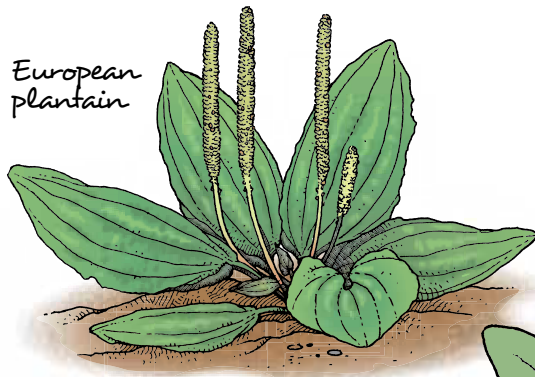
Identifying familiar weeds in your yard or garden.



APPENDIX A
COMMON WEEDS



COMMON WEEDS



European plantain



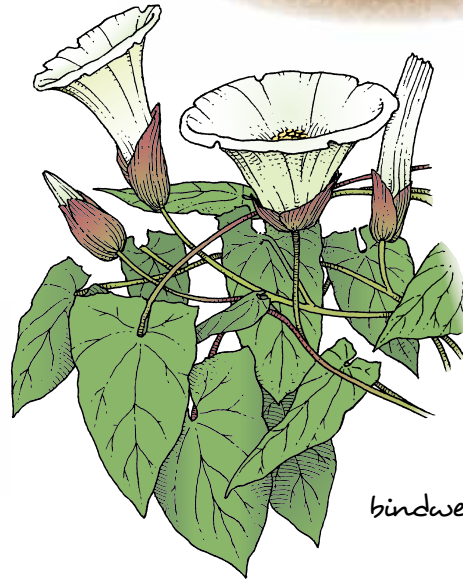
lambs quarters



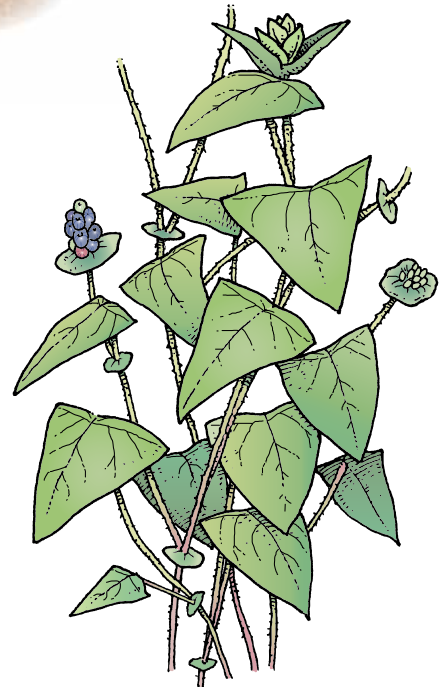
curly dock



garlic mustard



bindweed



mile-a-minute weed

INVASIVES

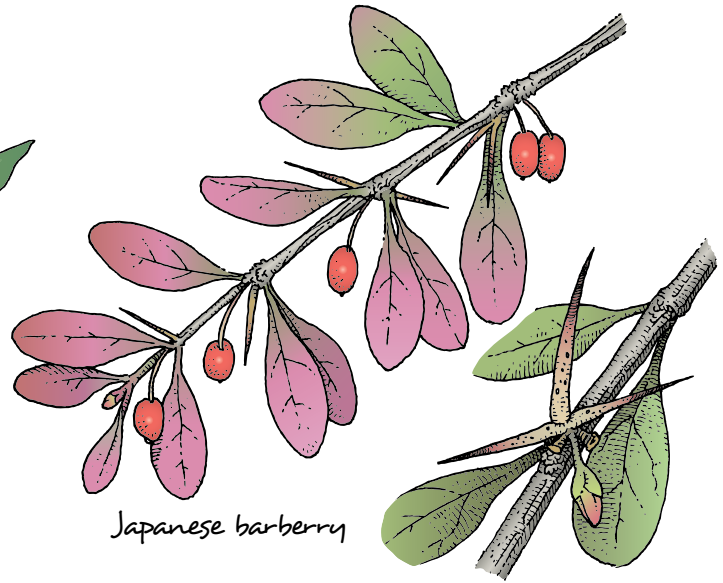
Identifying Common Invasive Plants that might be found in your yard or garden.



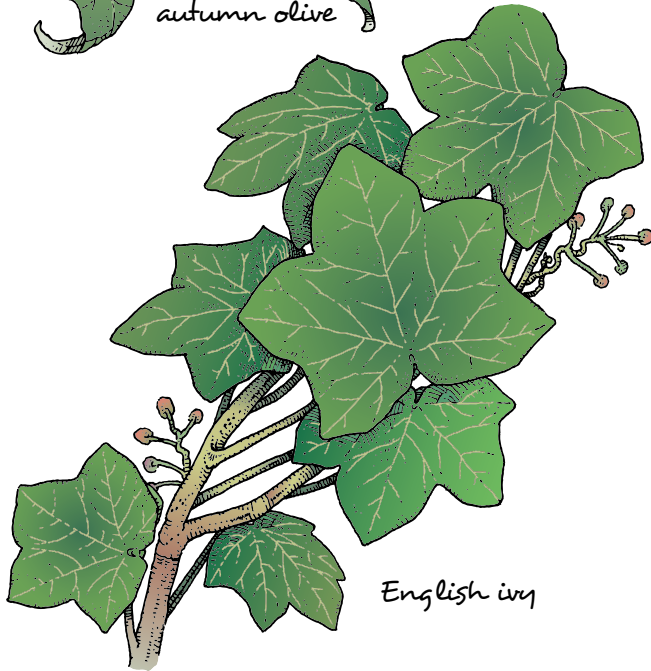
APPENDIX B
INVASIVES



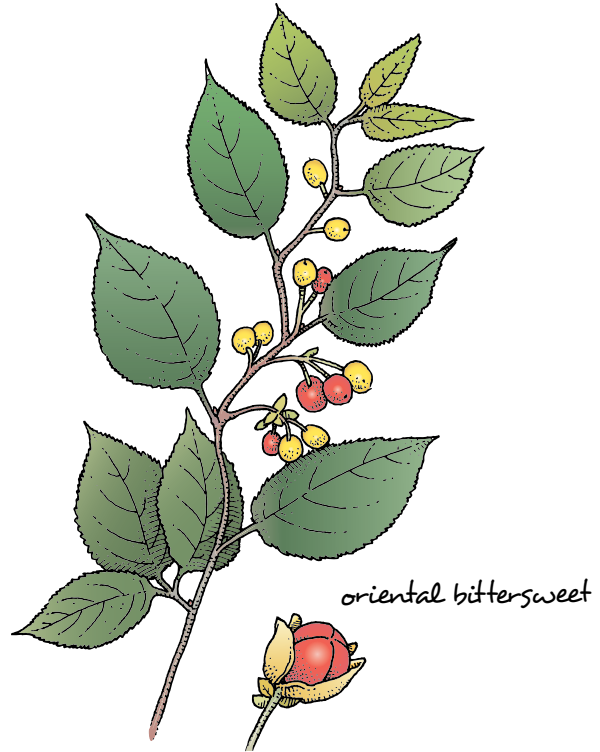
autumn olive



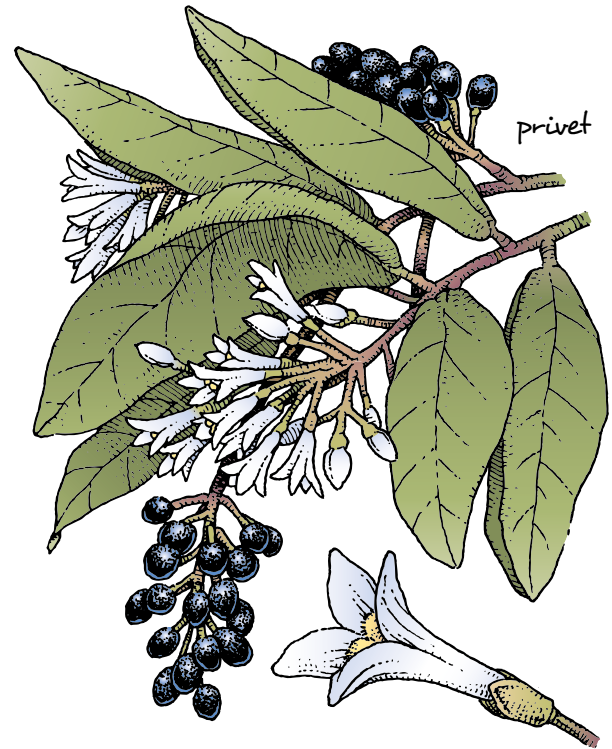
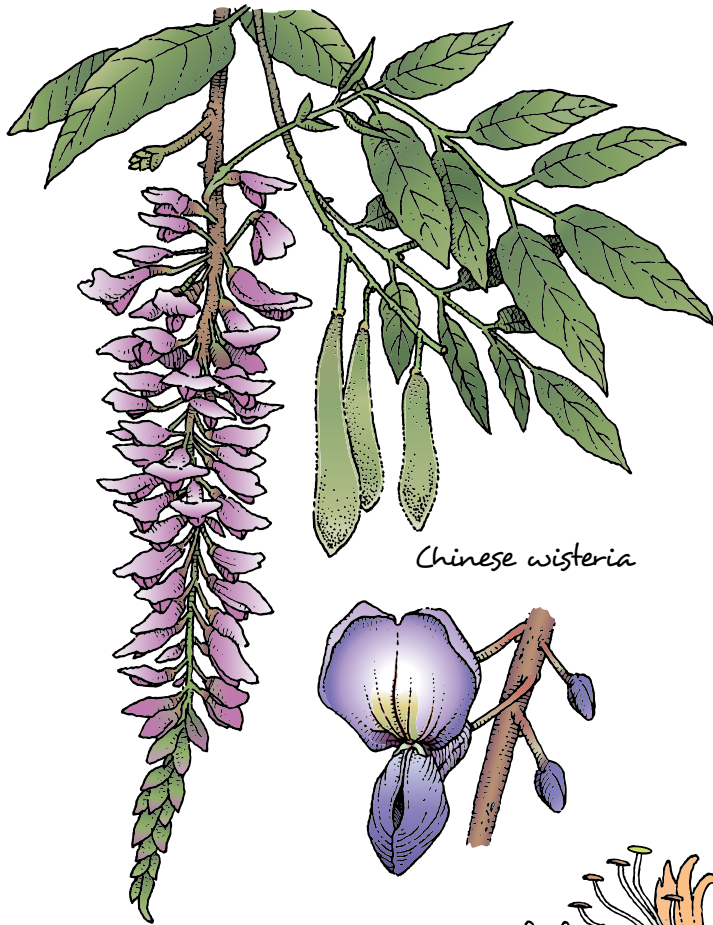
Japanese barberry



English ivy

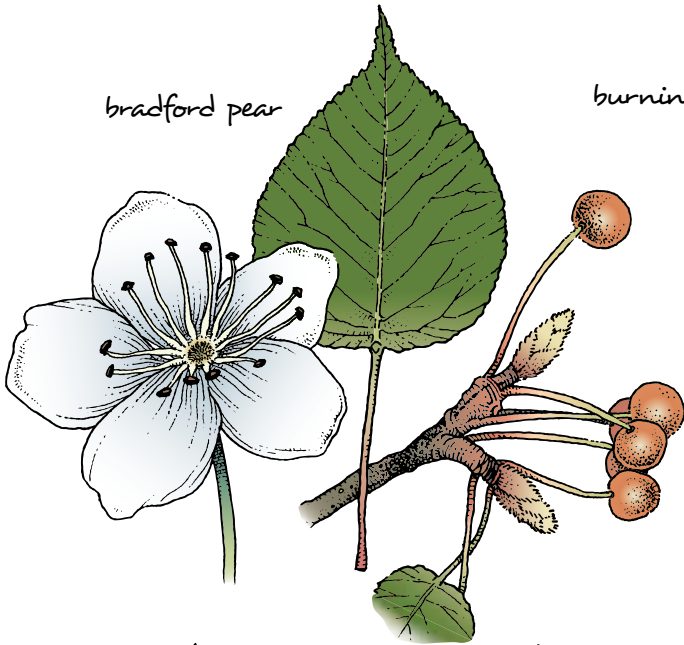


oriental bittersweet



INVASIVES

bradford pear



burning bush



Norway maple



golden bamboo



TABLE 1

NATIVE PLANT TABLE Native Plants to Consider for Smaller Spaces

This isn't an exhaustive list of all native plants, or the only ones that could do well in a small yard, but these are most of the native plants that will work in a typical residential landscape. This list gives you options for each of the template designs and/or any design you might be doing yourself. We've listed each plant in terms of height and growing conditions. Shrubs, vines, grasses and perennials are included. We have not listed trees here, but Table 2 (page 48) provides a list of small native trees to consider if you have a small yard.

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to medium Soil									
SHRUBS:									
<i>Ceanothus americanus</i>	New Jersey Tea	2-4 Ft	Sun to Part Shade	Dry to Medium	spring/sum	3-5 Ft	small shrub	white	drought, dry or, shallow-rocky soil
<i>Comptonia peregrina</i>	Sweet-Fern	2-4 Ft	Sun to Part Shade	Dry	NA	4-6 Ft	small shrub (does not transplant well once established; does well in poor soils)	NA	drought
<i>Diervilla lonicera</i>	Bush Honeysuckle	2-4 Ft	Sun to Part Shade	Dry to Medium	summer	2-4 Ft	small shrub	yellow	pruning
<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea	6-8 Ft	Sun to Part Shade	Medium	spring/sum	6-8 Ft	shrub border, specimen shrub (winter interest; fall color)	white changing purplish pink	
<i>Juniperus horizontalis</i>	Creeping Juniper	0.5 Ft	Sun	Dry to Medium	NA	8-10 Ft	ground cover, rock gardens, retaining walls, mass on slopes (erosion control)	NA	deer, drought, dry soil, erosion shallow-rocky soil
<i>Myrica pensylvanica</i>	Bayberry	5-10 Ft	Sun to Part Shade	Dry to Medium	NA	5-10 Ft	shrub border (need one male plant to pollinate)	NA	drought, salt, wide range of soil moisture
<i>Physocarpus opulifolius</i>	Ninebark	5-8 Ft	Sun to Shade	Wet to Dry	spring	4-8 Ft	effective as hedge or screen, backdrop shrub (all season interest)	white/pink	drought, erosion, clay soil, dry soil, shallow-rocky soil
<i>Rhododendron atlanticum</i>	Dwarf Azalea	2-6 Ft	Part Shade	Dry	spring	2-5 Ft	small shrub, patio specimen (best in acidic soils)	white	
<i>Spiraea betulifolia</i>	White Spirea	2-3 Ft	Sun	Medium	spring/sum	2-3 Ft	low hedge, specimen shrub	white	deer, wide range of soils
<i>Viburnum acerifolium</i>	Mapleleaf Viburnum	3-6 Ft	Sun to Shade	Dry to Medium	spring	2-4 Ft	shrub border, hedge	white	black walnut
<i>Viburnum dentatum</i>	Arrowwood Viburnum	6-10 Ft	Sun to Shade	Medium	spring	6-10 Ft	shrub borders, tall hedge or screen, backdrop	white	clay soil, black walnut

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to Medium Soil									
VINES:									
<i>Aristolochia macrophylla</i>	Dutchman's Pipevine	15 - 30 Ft	Sun to Part Shade	Medium	spring/sum	15 - 20 Ft	good for climbing pillars, posts, trellises, arbors, fences or walls (cut back in late winter to control growth)	yellow, purple	
<i>Lonicera sempervirens</i>	Trumpet Honeysuckle	6-15 Ft	Sun to Part Shade	Medium	spring/sum	3-6 Ft	cover for fence, arbor, trellis, wall, other structures	scarlet/orange	deer, black walnut
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	25-40 Ft	Sun to Shade	Dry to Wet	NA	5-10 Ft	good climber for brick or stone walls, large trellises, arbors, or fences (must be trimmed regularly to keep in bounds; can ruin painted surfaces)	NA	deer, drought, heavy shade, erosion, clay soil, black walnut
PERENNIALS and GRASSES:									
<i>Agastache foeniculum</i>	Anise Hyssop	2-4 Ft	Sun to Part Shade	Dry to Medium	summer	1.5-3 Ft	midground, background plant, herb garden	lavender to purple	deer, drought, dry soil
<i>Allium cernuum</i>	Nodding Onion	1-2 Ft	Sun to Part Shade	Dry to Medium	summer	.05 Ft	foreground, rock garden	pink	deer, drought, dry soil, shallow-rocky soil, black walnut
<i>Amsonia hubrichtii</i>	Blue Star	2-3 Ft	Sun to Part Shade	Medium	spring	2-3 Ft	foreground, midground, rock gardens (best when massed)	blue	deer
<i>Amsonia tabernaemontana</i>	Eastern Blue Star	2-3 Ft	Sun to Part Shade	Dry to Medium	spring	2-3 Ft	foreground, midground, containers (best when massed)	blue	deer, drought, clay soil
<i>Asclepias tuberosa</i>	Butterfly weed	1-3 Ft	Sun to Part Shade	Dry to Medium	summer	1-2 Ft	foreground, midground (does not transplant well once established)	orange	deer, drought, erosion, dry soil, shallow-rocky soil
<i>Aster oblongifolium</i>	Aromatic Aster	1-3 Ft	Sun	Dry to Medium	sum/fall	1-3 Ft	foreground, midground	blue/ purple	drought, erosion, shallow-rocky, clay soil, dry soil
<i>Baptisia australis</i>	Blue False Indigo	3-4 Ft	Sun to Part Sun	Dry to Medium	spring	3-4 Ft	midground (does not transplant well once established; attractive seed pods)	blue	rabbit, drought, erosion, shallow-rocky, clay or dry soil

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to Medium Soil									
PERENNIALS and GRASSES (cont'd.):									
<i>Callirhoe involucrata</i>	Winecups	1 Ft	Sun to Part Shade	Dry to Medium	spring/sum	1-3 Ft.	foreground, rock walls, groundcover (long tap root makes transplanting difficult)	purple	deer, drought, dry soil, shallow-rocky soil
<i>Coreopsis verticillata</i>	Threadleaf Coreopsis	1-3 Ft	Sun to Part Shade	Dry to Medium	summer	1-2 Ft	foreground (can spread aggressively)	yellow	deer, drought, dry soil, shallow-rocky soil
<i>Echinacea purpurea</i>	Purple Coneflower	2-4 Ft	Sun to Part Shade	Dry to Medium	summer	1-2 Ft	midground, background (long blooming)	purple	deer, drought, clay soil, dry soil, shallow-rocky soil
<i>Elymus hystrix</i>	Bottlebrush Grass	3 Ft	Sun to Part Shade	Dry to Medium	NA	1.5 Ft	midground (plant in shadier areas to keep from spreading too aggressively)	NA	drought, heavy shade, erosion, dry soil, black walnut
<i>Eryngium yuccifolium</i>	Rattlesnake Master	2-5 Ft	Sun	Dry to Medium	summer	2-3 Ft	midground, vertical interest (deep root system that should not be disturbed once established)	greenish-white	drought, erosion, clay soil, dry soil, shallow-rocky soil
<i>Heliopsis helianthoides</i>	Oxeye	2-6 Ft	Sun	Dry to Medium	summer	2-4 Ft	midground (long blooming; good cut flower)	yellow	drought, erosion, clay soil, dry soil, shallow-rocky soil
<i>Helenium autumnale</i>	Sneezeweed	2-5 Ft	Sun	Medium	summer/fall	2-3 Ft	midground	yellow	deer, clay soil, range of soil moisture
<i>Heuchera americana</i>	Alumroot	1-2 Ft	Sun to Part Shade	Dry to Medium	summer	1-1.5 Ft	foreground, ground cover, rock garden (attractive foliage)	greenish-white	drought
<i>Heuchera villosa</i>	Hairy Alumroot	1-2 Ft	Sun to Part Shade	Medium	summer	1-2 Ft	foreground, rock gardens (best when massed)	white to pink	
<i>Liatris spicata</i>	Blazing Star	2-4 Ft	Sun	Dry to Medium	summer/fall	1-2 Ft	foreground, midground, vertical accent	purple	drought, erosion, dry soil, shallow-rocky soil

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to Medium Soil									
PERENNIALS and GRASSES (cont'd.):									
<i>Liatrix squarrosa</i>	Scaly Blazing Star	1-2 Ft	Sun	Dry	summer	1-2 Ft	foreground, midground, (good for rock gardens)	purple	
<i>Monarda fistulosa</i>	Wild bergamot	2-4 Ft	Sun to Part Shade	Dry to Medium	summer	2-3 Ft	midground	pink/lavender	deer and black walnut
<i>Monarda punctata</i>	spotted beebalm	1-2 Ft	Sun to Part Shade	Dry to Medium	summer	1 Ft	foreground, containers	yellow w/ purple spots	deer, drought
<i>Oenothera fruticosa</i>	Sundrops	1-3 Ft	Sun to Part Shade	Dry to Medium	spring	1-2 Ft	foreground, rock garden (can be aggressive; plant in shadier locations to control spreading)	yellow	drought, erosion, dry soil, shallow-rocky soil
<i>Opuntia humifusa</i>	Prickly pear Cactus	Up to 1 Ft	Sun	Dry	spring/summer	1-2 Ft	rock garden, stone walls, small area groundcover (winter interest)	yellow	rabbit, drought
<i>Penstemon digitalis</i>	Beardtongue	2-5 Ft	Sun to Part Shade	Dry to Medium	spring	1-2 Ft	midground	white	deer, drought, clay soil, dry soil
<i>Penstemon smallii</i>	Beardtongue	1-2 Ft	Sun to Part Shade	Dry to Medium	summer	1 Ft	foreground, rock garden	pink	deer, drought, dry soil
<i>Phlox glaberrima</i>	Smooth Phlox	2-4 Ft	Sun to Part Shade	Medium	spring	2-2.5 Ft	midground	pink	deer
<i>Phlox subulata</i>	Moss Phlox	Up to 0.5 Ft	Sun	Dry	spring	1-2 Ft	ground cover, foreground, rock garden, spilling habit for rock wall	purple, pink, white	deer
<i>Physostegia virginiana</i>	Obedient Plant	2-4 Ft	Sun to Part Shade	Medium	summer	2-3 Ft	midground (can spread aggressively)	pink, white	deer, clay soil
<i>Ratibida pinnata</i>	Grey-head coneflower	3-5 Ft	Sun to Part Shade	Dry to Medium	summer	1.5-2 Ft	midground (best when massed)	yellow	drought, clay soil
<i>Rudbeckia fulgida</i>	Black-eyed Susan	2-3 Ft	Sun to Part Shade	Dry to Medium	summer/fall	2-3 Ft	midground	yellow/orange	deer, drought, clay, dry or shallow-rocky soil
<i>Ruellia humilis</i>	Prairie Petunia	1-2 Ft	Sun to Part Shade	Dry to Medium	summer/fall	1-2 Ft	foreground, rock garden	lavender	drought, dry soil, shallow-rocky soil
<i>Schizachyrium scoparium</i>	Little Bluestem	2-4 Ft	Sun to Part Shade	Dry to Medium	NA	1.5-2 Ft	midground, back-drop	NA	deer, drought, erosion, dry soil, shallow-rocky soil, black walnut

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to Medium Soil									
PERENNIALS and GRASSES (cont'd.):									
<i>Sedum ternatum</i>	Stonecrop	0.5 Ft	Sun to Part Shade	Medium	spring	.05 Ft	ground cover, rock garden	white	rabbit, deer, drought tolerant
<i>Silene virginica</i>	Fire Pink	1-1.5 Ft	Sun to Part Shade	Dry to Medium	spring	Up to 1.5 Ft	foreground, rock garden	red	drought, clay or dry soil, shallow-rocky soil, deer
<i>Solidago speciosa</i>	Showy Goldenrod	2-6 Ft	Sun to Part Shade	Dry to Medium	summer/fall	2-3 Ft	midground, backdrop (not as aggressive as other goldenrods)	yellow	deer, drought, clay soil
<i>Symphotrichum ericoides</i>	Snow flurry aster	0.5 Ft	Sun	Dry to Medium	fall	1 Ft	rock gardens, ground cover, ledges	white	drought, erosion, clay, dry or shallow-rocky soil
<i>Waldsteinia fragarioides</i>	Barren Strawberry	0.5 Ft	Sun to Part Shade	Medium	spring	1 Ft	ground cover, rock garden,	yellow	deer, clay soil
Sun to Part Shade - Wet to Medium Soil									
SHRUBS:									
<i>Aronia melanocarpa</i>	Black Chokeberry	3-5 Ft	Sun to Part Shade	Wet to Medium	spring	3-6 Ft	shrub border (remove root suckers to prevent spread)	white	wet soil
<i>Cephalanthus occidentalis</i>	Buttonbush	6-12 Ft	Sun to Part Shade	Wet to Medium	spring/summer	4-8 Ft	good along pond edge, low spots (fragrant)	white	wet soil
<i>Clethra alnifolia</i>	Summer sweet	3-8 Ft	Shade to Sun	Wet to Medium	summer	4-6 Ft	background shrub, specimen shrub, good near patio (great for butterflies, fragrant, look for small varieties like 'Hummingbird' for small spaces)	white	heavy shade, erosion, clay soil, wet soil
<i>Cornus sericea</i>	Red osier Dogwood	6-12 Ft	Sun to Part Shade	Wet to Medium	spring	7-10 Ft	good as screen or shrub border (winter interest, remove root suckers to prevent spreading)	white	deer, erosion, clay soil, wet soil
<i>Fothergilla gardenii</i>	Dwarf Fothergilla	1.5-3 Ft	Sun to Part Shade	Medium	spring	2-4 Ft	small shrub, nice accent	white	fragrant
<i>Ilex glabra</i>	Inkberry	5-8 Ft	Sun to Part Shade	Wet to Medium	NA	5-8 Ft	backdrop, low hedge (slow growing, evergreen, winter interest)	NA	rabbit, deer, erosion, wet soil

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
SHRUBS (cont'd.):									
<i>Ilex verticillata</i>	Winterberry	3-12 Ft	Sun to Part Shade	Wet to Medium	spring	3-12 Ft	backdrop shrub (attractive red berries in winter, need separate male and female plants for berries, look for smaller varieties like 'Sprite' for small spaces)	white	erosion, clay soil, wet soil,
<i>Itea virginiana</i>	Virginia Sweetpire	3-5 Ft	Sun to Shade	Wet to Medium	spring	4-6 Ft	backdrop shrub (fragrant)	white	heavy shade, erosion, clay or wet soil
<i>Hydrangea quercifolia</i>	Oakleaf Hydrangea	6-8 Ft	Sun to Part Shade	Medium	spring/summer	6-8 Ft	shrub border, specimen shrub (winter interest, fall color)	white changing to pink	
<i>Physocarpus opulifolius</i>	Ninebark	5-8 Ft	Sun to Shade	Wet to Dry	spring	4-8 Ft.	effective as hedge or screen, backdrop shrub (all season interest)	white	drought, erosion, clay, dry or shallow-rocky soil
<i>Rhododendron viscosum</i>	Swamp Azalea	3-5 Ft	Part Shade	Wet to Medium	spring/summer	3-5 Ft	small shrub (best grown in acidic soil)	white to purplish pink	
<i>Rosa carolina</i>	Pasture Rose	3-6 Ft	Sun to Part Shade	Wet to Medium	spring	5-10 Ft	hedge (fragrant)	white/ pink	
<i>Rhododendron calendulaceum</i>	Flame Azalea	4-8 Ft	Part Shade	Medium	spring	8-10 Ft	specimen shrub (best grown in acidic soil)	yellow to orange	
<i>Rhododendron carolinianum</i>	Carolina Azalea	3-6 Ft	Part Shade	Medium	spring	3-6 Ft	specimen shrub (best grown in acidic soil)	pink	
<i>Spiraea alba</i>	Meadowsweet	3-4 Ft	Sun to Part Shade	Medium	summer	3-4 Ft	small shrub (needs constant moisture)	white	deer, wet soil
<i>Spiraea betulifolia</i>	White Spirea	2-3 Ft	Sun	Medium	spring/summer	2-3 Ft	low hedge, specimen shrub (tolerates wide range of soils)	white/ pink	deer
<i>Vaccinium corymbosum</i>	Highbush Blueberry	6-8 Ft	Sun to Part Shade	Wet to Dry	spring	6-8 Ft	Good hedge, backdrop shrub (plant with rhododendrons and azaleas which share similar acidic soil requirements), Makes an excellent hedge with the added benefits of summer fruit which can be harvested or left for the birds. Good fall color.	white	

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
SHRUBS (cont'd.):									
<i>Viburnum dentatum</i>	Arrowwood Viburnum	6-10 Ft	Sun to Shade	Medium	spring	6-10 Ft	shrub border, tall hedge or screen, backdrop shrub	white	clay soil, black walnut
<i>Viburnum nudum</i>	Witherod Viburnum	5-12 Ft	Sun to Shade	Wet to Medium	spring	5-12 Ft	shrub borders, foundations, hedges, good selection for low spots and peripheries of water gardens, backdrop shrub (good fall foliage)	white	
<i>Viburnum trilobum</i>	American Cranberry bush Viburnum	6-12 Ft	Sun to Shade	Wet to Medium	spring	8-12 Ft	shrub borders, hedge or screen (good fall foliage)	white	
VINES:									
<i>Aristolochia macrophylla</i>	Dutchman's Pipevine	15-30 Ft	Sun to Part Shade	Medium	spring/summer	15-20 Ft	good for climbing pillars, posts, trellises, arbors, fences or walls (intolerant of dry soils, cut back late winter to control growth, large, heart-shaped, densely overlapping leaves)	yellow, purple	
<i>Lonicera sempervirens</i>	Trumpet Honeysuckle	6-15 Ft	Sun to Part Shade	Medium	spring/summer	3-6 Ft	cover for fence, arbor, trellis, wall or other structures	scarlet/orange	deer, black walnut
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	25-40 Ft	Sun to Shade	Dry to Wet	NA	5-10 Ft	good climber for brick or stone walls, large trellises, arbors, or fences (trim regularly to keep in bounds, can ruin painted surfaces)	NA	deer, drought, heavy shade, erosion, clay soil, black walnut
PERENNIALS:									
<i>Amsonia hubrichtii</i>	Blue Star	2-3 Ft	Sun to Part Shade	Medium	spring	2-3 Ft	foreground, mid-ground, rock gardens (best when massed)	blue	deer
<i>Anemone canadensis</i>	Canada Anemone	1-3 Ft	Sun to Shade	Medium	spring	2 Ft	groundcover (low growing, spreading flower)	white	deer
<i>Asclepias incarnata</i>	Swamp Milkweed	2-4 Ft	Sun to Part Shade	Wet to Medium	summer	2-3 Ft	midground	pink	deer, clay soil, wet soil
<i>Carex vulpinoidea</i>	Fox Sedge	1-3 Ft	Sun to Part Shade	Medium to Wet	NA	1-2 Ft	foreground (can be weedy)	NA	deer
<i>Chelone glabra</i>	White turtlehead	1-3 Ft	Sun to Part Shade	Wet to Medium	fall	1.5-2.5 Ft	foreground, mid-ground, good pond or water garden plant	white, tinged w/ pink	wet soil

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
PERENNIALS (cont'd):									
<i>Chelone lyonii</i>	Pink turtlehead	2-3 Ft	Sun to Part Shade	Wet to Medium	summer/fall	1.5-2.5 Ft	foreground, midground, good pond or water garden plant	pink	deer, wet soil
<i>Coreopsis rosea</i>	Pink Coreopsis	1-2 Ft	Sun to Part Shade	Wet to Medium	summer	1.5-2.5 Ft	foreground, small area groundcover, rock gardens (long summer bloomer)	pink	deer, wide range of soil moisture
<i>Eutrochium dubium</i>	Little Joe-pye weed	3-4 Ft	Sun to Part Shade	Wet to Medium	summer	1-3 Ft	midground	mauve	deer, clay soil, wet soil
<i>Eupatorium maculatum</i>	Joe-pye weed	5-8 Ft	Sun to Part Shade	Wet to Medium	summer/fall	1-2 Ft	backdrop	dusty rose	deer, clay soil, wet soil
<i>Helenium autumnale</i>	Sneezeweed	2-5 Ft	Sun	Medium	summer/fall	2-3 Ft	midground	yellow	deer, clay soil, wet soil
<i>Hibiscus moscheutos</i>	Rose-mallow	3-7 Ft	Sun to Part Shade	Wet to Medium	summer	3-4 Ft	backdrop, along pond edge	white to pink	
<i>Iris versicolor</i>	Blue Flag Iris	2-3 Ft	Sun to Part Shade	Wet to Medium	spring	2-3 Ft	midground, around ponds	blue	deer, wet soil
<i>Liatris spicata</i>	Blazing star	2-4 Ft	Sun to Part Shade	Medium	summer	1-1.5 Ft	midground, background, vertical interest (does best in moist soils)	purple	drought, clay soil
<i>Lobelia cardinalis</i>	Cardinal Flower	2-4 Ft	Sun to Shade	Wet to Medium	summer	1-2 Ft	midground, vertical interest, pond edge	red	rabbit, deer, wet soil
<i>Lobelia siphilitica</i>	Great Blue Lobelia	2-3 Ft	Sun to Shade	Wet to Medium	summer	1-1.5 Ft	midground, vertical interest, pond edge	blue	deer, heavy shade, wet soil
<i>Monarda didyma</i>	Bee Balm	2-4 Ft	Sun to Part Shade	Wet to Medium	summer	2-3 Ft	midground, vertical interest (plants can move around garden)	red	rabbit, deer, clay soil, wet soil, black walnut
<i>Phlox carolina</i>	Summer phlox	2-3 Ft	Sun	Wet to Moist	spring/summer	1-2 Ft	midground	pink	deer, clay soil, wet soil
<i>Phlox paniculata</i>	Fall phlox	2-4 Ft	Sun to Part Shade	Medium	summer/fall	2-3 Ft	midground (long-blooming)	pink, white	deer and black walnut

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
PERENNIALS (cont'd):									
<i>Sedum ternatum</i>	Stonecrop	.05 Ft	Sun to Part Shade	Medium	spring	.05 Ft	ground cover, rock garden	white	rabbit, deer, drought
<i>Sisyrinchium angustifolium</i>	Blue-eyed grass	1-2 Ft	Sun to Part Shade	Medium	spring	1 Ft	foreground, ground cover, rock gardens (can spread)	blue	clay soil
<i>Symphotrichum novae-angliae</i>	New England Aster	2-6 Ft	Sun to Part Shade	Medium	summer/fall	2-3 Ft	midground (can spread)	purple	clay soil
<i>Symphotrichum novi-belgii</i>	New York Aster	3-6 Ft	Sun to Part Shade	Medium	summer/fall	2-3 Ft	midground (can spread)	purple	deer, clay soil, wet soil
<i>Vernonia noveboracensis</i>	New York ironweed	3-6 Ft	Sun to Part Shade	Wet to Medium	summer	3-4 Ft	backdrop	purple	
<i>Veronicastrum virginicum</i>	Culver's root	3-6 Ft	Sun to Part Shade	Wet to Medium	spring	3-4 Ft	midground, background, vertical interest	white	
<i>Waldsteinia fragarioides</i>	Barren Strawberry	.05 Ft	Sun to Part Shade	Medium	spring	1 Ft	ground cover, rock garden	yellow	deer, clay soil
Sun to Part Shade - Dry to Medium Soil									
SHRUBS:									
<i>Hydrangea arborescens</i>	Smooth Hydrangea	3-5 Ft	Part Shade	Medium	summer	3-5 Ft	backdrop shrub	white	rabbit, erosion, clay, dry, wet, or shallow-rocky soil, black walnut
<i>Physocarpus opulifolius</i>	Ninebark	5-8 Ft	Sun to Shade	Wet to Dry	spring	4-8 Ft	hedge or screen, backdrop shrub (all season interest)	white/pink	drought, erosion, clay soil, dry soil, shallow-rocky soil
<i>Viburnum acerifolium</i>	Mapleleaf Viburnum	3-6 Ft	Sun to Shade	Dry to Medium	spring	2-4 Ft	shrub border/hedge	white	black walnut
<i>Viburnum dentatum</i>	Arrowwood Viburnum	6-10 Ft	Sun to Shade	Medium	spring	6-10 Ft	shrub borders, tall hedge or screen, backdrop shrub	white	clay soil, black walnut
VINES:									
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	25-40 Ft	Sun to Shade	Dry to Wet	NA	5-10 Ft	Climber for brick or stone walls of buildings, large trellises, arbors, or fences (must be trimmed regularly to keep in bounds, can ruin painted surfaces)	NA	deer, drought, heavy shade, erosion, clay soil, black walnut

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Dry to Medium Soil									
PERENNIALS:									
<i>Actaea racemosa</i>	Black Cohosh	3-5 Ft	Shade to Part Shade	Medium	summer	2-4 Ft	backdrop (adds architectural height)	white	
<i>Anemone canadensis</i>	Canada Anemone	1-3 Ft	Sun to Shade	Medium	spring	2 Ft	groundcover (low growing, spreading flower)	white	deer
<i>Aquilegia canadensis</i>	Wild Columbine	1-3 Ft	Part Shade to Shade	Dry to Medium	spring	1-1.5 Ft	foreground, rock garden (long tap root makes transplanting difficult)	red	rabbit, deer, drought, dry soil
<i>Callirhoe involucrata</i>	Winecups	1 Ft	Part Shade	Dry to Medium	spring/summer	1-3 Ft	foreground, rock walls, groundcover	purple	drought, dry soil, shallow-rocky soil
<i>Dryopteris marginalis</i>	Evergreen Wood Fern	1-3 Ft	Shade to Part Shade	Dry to Medium	NA	1.5 - 2 Ft	foreground, containers, rock garden, along shaded walls or buildings (winter interest)	NA	rabbit, heavy shade, clay soil
<i>Geranium maculatum</i>	Wild geranium	1-2 Ft	Part Shade to Shade	Medium	spring	1-1.5 Ft	foreground, small area groundcover	pink	rabbit, deer, drought, dry soil
<i>Monarda punctata</i>	Spotted Beebalm	1-2 Ft	Sun to Part Shade	Dry to Medium	summer	1 Ft	foreground, containers	yellow with purple spots	deer, drought
<i>Pachysandra procumbens</i>	Allegheny Pachysandra	0.5-1 Ft	Shade to Part Shade	Medium	spring	1-2 Ft	groundcover (attractive foliage)	white	drought, heavy shade
<i>Polystichum acrostichoides</i>	Christmas Fern	1-2 Ft	Shade to Part Shade	Medium	NA	1-2 Ft	foreground	NA	rabbit, deer, drought, heavy shade, erosion, dry soil, shallow-rocky soil
<i>Sedum ternatum</i>	Stonecrop	0.5 Ft	Sun to Part Shade	Medium	spring	.05 Ft	ground cover, rock garden (evergreen)	white	rabbit, deer, drought
<i>Solidago caesia</i>	Wreath Goldenrod	1-3 Ft	Sun to Shade	Dry to Medium	summer/fall	1.5-3 Ft	foreground, midground (does not spread aggressively as do some of the other goldenrod species and hybrids)	yellow	deer, drought, clay soil
<i>Waldsteinia fragarioides</i>	Barren Strawberry	.05 Ft	Sun to Part Shade	Medium	spring	1 Ft	ground cover, rock garden	yellow	deer, clay soil

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of: (Notes)
Sun to Part Shade - Wet to Medium Soil									
SHRUBS:									
<i>Clethra alnifolia</i>	Summer sweet	3-8 Ft	Sun to Shade	Wet to Medium	summer	4-6 Ft	background shrub, shrub in lawn, good near patio Great for butterflies, fragrant. Look for small varieties like 'Hummingbird' for small spaces	white	heavy shade, erosion, clay soil, wet soil
<i>Euonymus americanus</i>	Strawberry-bush	4-6 Ft	Shade to Part Shade	Medium	NA	4-6 Ft	shrub, hedge	NA	clay soil, black walnut
<i>Eutrochium dubium</i>	Little Joe-pye weed	3-4 Ft	Sun to Part Shade	Wet to Medium	summer	1-3 Ft	midground	mauve	deer, clay soil, wet soil
<i>Hydrangea arborescens</i>	Smooth Hydrangea	3-5 Ft	Part Shade	Medium	summer	3-5 Ft	backdrop shrub	white	rabbit, erosion, clay soil, dry soil, wet soil, shallow-rocky soil, black walnut
<i>Itea virginiana</i>	Virginia Sweetspire	3-5 Ft	Sun to Shade	Wet to Medium	spring	4-6 Ft	backdrop shrub, fragrant	white	heavy shade, erosion, clay soil, wet soil
<i>Lindera benzoin</i>	Spicebush	6-12 Ft	Shade to Part Shade	Wet to Medium	spring	6-12 Ft	shrub border	yellow	deer, drought, heavy shade, clay soil
<i>Physocarpus opulifolius</i>	Ninebark	5-8 Ft	Sun to Shade	Wet to Dry	spring	4-8 Ft	hedge or screen, backdrop shrub (all season interest)	white/pink	drought, erosion, clay soil, dry soil, shallow-rocky soil
<i>Rhododendron maximum</i>	Rosebay Rhododendron	5-15 Ft	Shade to Part Shade	Wet to Medium	summer	5-12 Ft	shrub border (needs acidic soils)	white to pink	
<i>Rhododendron periclymenoides</i>	Pinxter	3-6 Ft	Part Shade	Medium	spring	4-7 Ft	specimen shrub (needs acidic soils)	white to pink	
<i>Viburnum dentatum</i>	Arrowwood Viburnum	6-10 Ft	Sun to Shade	Medium	spring	6-10 Ft	shrub borders, hedge or screen, backdrop shrub	white	clay soil, black walnut
<i>Viburnum nudum</i>	Witherod Viburnum	5-12 Ft	Sun to Shade	Wet to Medium	spring	5-12 Ft	shrub borders, hedge, low spots and peripheries of water gardens, backdrop shrub (good fall foliage)	white	
VINES:									
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	25-40 Ft	Sun to Shade	Wet to Dry	NA	5-10 Ft	Climber for brick or stone walls of buildings, large trellises, arbors, or fences (must be trimmed regularly to keep in bounds; can ruin painted surfaces)	NA	deer, drought, heavy shade, erosion, clay soil, black walnut

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
PERENNIALS AND FERNS:									
<i>Actaea racemosa</i>	Black Cohosh	3-5 Ft	Shade to Part Shade	Medium	summer	2-4 Ft	backdrop (adds architectural height)	white	
<i>Adiantum pedatum</i>	Maidenhair Fern	1-2 Ft	Shade to Part Shade	Medium	NA	1-1.5 Ft	foreground, midground (beautiful, lasting foliage)	NA	heavy shade
<i>Anemone canadensis</i>	Canada Anemone	1-3 Ft	Sun to Shade	Medium	spring	2 Ft	groundcover (low growing, spreading flower)	white	deer
<i>Aruncus dioicus</i>	Goat's-beard	3-6 Ft	Part Shade to Shade	Wet to Medium	spring	2-4 Ft	backdrop (can take time to establish in garden)	white	rabbit
<i>Asarum canadense</i>	Wild Ginger	6-12 Ft	Shade to Part Shade	Medium	spring	1-1.5 Ft	foreground, groundcover	brown	deer, heavy shade, erosion, wet soil
<i>Athyrium filix-femina</i>	Lady Fern	1-3 Ft	Part Shade	Wet to Medium	NA	1-2.5 Ft	foreground, midground (nice texture)	NA	rabbit, heavy shade
<i>Carex vulpinoidea</i>	Fox Sedge	1-3 Ft	Sun to Part Shade	Medium to Wet	NA	1-2 Ft	foreground (can be weedy)	NA	deer
<i>Chrysogonum virginianum</i>	Green-and-gold	0.5 - 1 Ft	Shade to Part Shade	Medium to Wet	spring/summer/fall	1-1.5 Ft	foreground, groundcover (long bloomer)	yellow	heavy shade
<i>Cimicifuga racemosa</i>	Black Cohosh	2-6 Ft	Part Shade to Shade	Medium	summer	2-4 Ft	midground, vertical interest (nice lasting green foliage)	white	rabbit
<i>Dicentra exima</i>	Bleeding Heart	1-2 Ft	Shade to Part Shade	Medium	spring/summer	1-1.5 Ft	foreground (delicate foliage, long bloomer)	pink	rabbit
<i>Geranium maculatum</i>	Wild geranium	1-2 Ft	Shade to Part Shade	Medium	spring	1-1.5 Ft	foreground, small area groundcover	pink	rabbit, deer, drought, dry soil
<i>Iris cristata</i>	Dwarf Crested Iris	Up to 0.75 Ft	Shade to Part shade	Medium	spring	0.5-1 Ft	groundcover, rock garden	blue	deer, drought
<i>Lobelia cardinalis</i>	Cardinal Flower	2-4 Ft	Sun to Shade	Wet to Medium	summer	1-2 Ft	midground, vertical interest, pond edge	red	rabbit, deer, wet soil
<i>Lobelia siphilitica</i>	Great Blue Lobelia	2-3 Ft	Sun to Shade	Wet to Medium	summer	1-1.5 Ft	midground, vertical interest, pond edge	blue	deer, heavy shade, wet soil
<i>Matteuccia struthiopteris</i>	Ostrich Fern	3-5 Ft	Shade to Part Shade	Wet to Medium	NA	5-8 Ft	backdrop	NA	rabbit, heavy shade, clay soil
<i>Osmunda cinnamomea</i>	Cinnamon Fern	2-3 Ft	Shade to sun	Wet to Medium	NA	2-3 Ft	midground (interesting texture)	NA	rabbit, heavy shade

TABLE 1 Native Plant Table Continued

Scientific Name	Common Name	Approx. Height	Light	Moisture	Bloom Time	Approx. Width	Plant Use in Design	Color	Tolerant of:
Sun to Part Shade - Wet to Medium Soil									
PERENNIALS AND FERNS (Cont'd):									
<i>Osmunda regalis</i>	Royal Fern	2-3 Ft	Shade to Part Shade	Wet to Medium	NA	2-3 Ft	midground, pond edge	white	rabbit, heavy shade, wet soil
<i>Phlox divaricata</i>	Wild Blue Phlox	1 Ft	Shade to Part Shade	Medium	spring	1 Ft	ground cover, foreground, rock garden	blue	deer, drought, clay soil, wide range of soil moisture
<i>Phlox stolonifera</i>	Creeping Phlox	0.5 - 1 Ft	Sun to Part Shade	Medium	summer	0.75-1.5 Ft	foreground, ground-cover, rock garden	purple	rabbit, deer, drought, air pollution
<i>Polygonatum biflorum</i>	Solomon's Seal	1-3 Ft	Shade to Part shade	Medium	spring	1-1.5 Ft	foreground, midground (graceful, arching habit)	white	
<i>Polystichum acrostichoides</i>	Christmas Fern	1-2 Ft	Shade to Part Shade	Medium	NA	1-2 Ft	foreground (evergreen)	NA	rabbit, deer, drought, heavy shade, erosion, wide range of soil moisture
<i>Sanguinaria canadensis</i>	Bloodroot	0.5 - 0.75 Ft	Shade to Part Shade	Medium	spring	0.5 Ft	foreground (very early spring bloomer, interesting foliage)	white	wide range of soil moisture
<i>Sedum ternatum</i>	Stonecrop	0.5 Ft	Sun to Part Shade	Medium	spring	0.5 Ft	ground cover, rock garden	white	rabbit, deer, drought
<i>Senecio aureus</i>	Golden Ragwort	1-2 Ft	Shade to Sun	Wet to Medium	spring	0.5-1.5 Ft	foreground, ground-cover (semi-evergreen)	yellow	wet soil
<i>Smilacena racemosa</i>	False Solomon's Seal	1-3 Ft	Shade to Part shade	Medium	spring	1-3 Ft	midground (graceful, arching habit)	white	
<i>Stylophorum diphyllum</i>	Wood Poppy	1-2 Ft	Shade to Part Shade	Medium	spring	1-3 Ft	foreground (spreads easily)	yellow	heavy shade, wet soil
<i>Tiarella cordifolia</i>	Foam Flower	0.5 - 1 Ft	Shade to Sun	Medium	spring	1-2 Ft	foreground, groundcover, rock garden	white	rabbit, deer
<i>Waldsteinia fragarioides</i>	Barren Strawberry	0.5 Ft	Sun to Part Shade	Medium	spring	1 Ft	ground cover, rock garden	yellow	deer, clay soil

This table was compiled from information on the Missouri Botanical Garden Plant Finder website; the native plant database at the Ladybird Johnson Wildflower Center; Penn State Extension; and native plant information available on the Pennsylvania Department of Conservation and Natural Resources website.

TABLE 2

TEN SMALL NATIVE TREES *ideal for the yard*

1. Red bud
(*Cercis canadensis*)
2. Alternate dogwood
(*Swida alternifolia*)
3. Sweetbay magnolia
(*Magnolia virginiana*)
4. Smooth Blackhaw
(*Viburnum prunifolium*)
5. Flowering dogwood
(*Cornus florida*)
6. Buttonbush
(*Cephalanthus occidentalis*)
7. Eastern red cedar
(*Juniperus virginiana*)
8. Serviceberry
(*Amelanchier canadensis*)
9. American witch hazel
(*Hamamelis virginiana*)
10. Bottlebrush buckeye
(*Aesculus parviflora*)



Sweetbay magnolia



American witch hazel



Eastern red cedar



Buttonbush



Red bud

Bransford

TEN SMALL NATIVE TREES CONTINUED



Serviceberry



Alternate dogwood



Flowering dogwood



Bottlebrush buckeye



Smooth Blackhaw

RESOURCES

The online website **PlantNative** has a searchable database of native plant nurseries in each state.

<http://www.plantnative.org>

The **National Wildlife Federation's** website has information about gardening for wildlife.

<https://www.nwf.org/Garden-for-Wildlife>

The **Pennsylvania Department of Conservation and Natural Resources** website has information about landscaping with native plants.

<https://www.dcnr.pa.gov/Conservation/WildPlants/LandscapingwithNativePlants/Pages/default.aspx>

"Everyone deserves beauty."

Bernadette Cozart

