HOW TO CREATE A STREAMSIDE BUFFER GARDEN

Vegetative buffers help stabilize stream banks, prevent erosion, slow runoff, and provide food and shelter for a wide array of wildlife. Buffers can also be backyard gardens that are inviting places to stroll while enjoying views of the stream they protect. It is fun and relatively easy to create a streamside buffer garden. Follow the three simple steps below, and start a buffer garden that you—and your stream—will enjoy!!

Size Up Your Streamside Buffer Garden
To design your buffer garden start with a property plot plan. A plot plan is usually available at town hall, or you can create one by measuring the distances between your house, driveway, garage, etc. and the stream. On the plot plan roughly sketch how much lawn you need for family activities and draw in existing trees and landscaping. The remaining yard area, adjacent to the stream, is your potential buffer garden.

To determine the best size for your buffer garden consider the length you have available alongside the stream, as well as the width available on one or both sides of the stream.

LENGTH is important. Wildlife travel along streamside corridors seeking food and shelter. Try to create a buffer garden along the entire stream length on your property. Paths through the buffer garden can provide access and views of the stream.

WIDTH is also important. The wider the buffer, the more effectively it will intercept and filter runoff, stabilize the soil to prevent erosion, and support wildlife. Conservationists recommend at least a 35-foot wide buffer, but a narrower buffer is better than no buffer at all!

If you have limited time or a limited budget start small. Plant as much buffer garden next to the stream as possible, and in subsequent years you can add plantings to lengthen, or widen, your buffer garden.

Design for Everyday Beauty and Pleasure
If you are like most people, you have access to a stream because you enjoy the sight and sound of the water on your property. Your buffer garden should preserve and enhance this relationship with the stream. It should also include plants with shapes, blooms, colors and fragrances that are pleasing to you as well as the local birds, bees, and butterflies.

Sketch a Design on your plot plan showing your planting areas and where you want to put trees, shrubs, flowers, meadow grasses and ferns. Also sketch in walking paths and views of the stream. A good way to preserve views of the stream is to put shorter plants along the paths and taller plants at the outer “frame” of view.

Before deciding what to plant consider the environmental conditions in the buffer garden. You will need an idea of the soil moisture and light regime. Note how wet or dry the planting area is, and how sunny or shady it is. Also note areas that are seasonally wet or flooded.

Now you can choose plants that are right for your garden. Refer to any one of the excellent websites referenced on the other side, or peruse a good garden book. Consider species native to southern New England first. They are adapted to our climate and are tolerant of the local soils and pests. Native plants also attract native wildlife, and can be essential to native bird and butterfly survival.

Diversify your buffer garden by choosing a variety of trees, shrubs, grasses and flowering perennials. A mixture of plant heights and colors will add visual interest, and different plant types work together to better protect the stream. Tree and shrub roots grow deeply, preventing undermining of stream banks, while perennials and meadow grasses intercept runoff and help keep surface soil from eroding. And of course, flowering and fruit-bearing plants help feed a wide variety of wildlife species throughout the year.

Implement Your Design
Using your design sketch, mark out the planting areas either by eye or with a measuring tape. Stakes, flags, flagging tape or temporary spray paint can help you demarcate planting areas and visualize your buffer garden.

To prepare for planting you will need to clear any weeds or other vegetation and turn the soil. You may also choose to lay down a layer of mulch before you plant, although it can be added afterwards.

If you are planting an area that is lawn you can use a sod-stripper or rototiller, or you can use a smothering technique. To smother, lay a thick layer of newspapers (up to 12 sheets!) on the grass and cover with 4-6” of mulch. Grass can also be smothered by covering it completely with black plastic or cardboard until it turns brown and dies (this takes some time).

Also make sure to look for, and remove, any non-native invasive plants since they can overrun your new garden (to learn more about invasives go to www.hort.uconn.edu/cipwg/).

Now you are ready to plant!

Generally, each plant species has a preferred soil acidity and soil fertility. Ask a professional at the garden center or nursery where you purchase your plants for planting information and plant care recommendations. And remember, leave enough space between the plants so they have room to grow to their full mature size!

TO PREPARE FOR PLANTING.
Care and Maintenance of Your Buffer Garden

As with any garden, once you have planted you will need to keep it well watered and weeded for the first 2 to 3 years. If you use mulch you will need to renew it until your plants are big enough to shade out the weeds. Although many native plants require little care, if you choose you can prune shrubs and trees, and cut back or divide grasses and perennials. Alternatively, you can let your buffer garden go wild. And remember, as you enrich your garden, your garden will nurture you!

Native Plants for Buffer Gardens

There are many beautiful native plants that will thrive in a streamside buffer garden. Below are just some of the trees, shrubs and perennials that you might choose from.

**TREES**
- Black Willow*
- Red Maple*
- River Birch
- Swamp White Oak

**SHRUBS**
- American Cranberrybush
- Black Chokeberry*
- Blackhaw Viburnum
- Buttonbush*
- Common Elderberry*
- Highbush Blueberry
- Inkberry
- Meadowweet*
- Northern Arrowood
- Pussy Willow*
- Red-Osier Dogwood*
- Shadbush/Servietberry
- Silky Dogwood*
- Spicebush
- Steeplebush*
- Summersweet Clethra
- Swamp Azalea
- Sweetgale
- Winterberry
- Witch Hazel

**PERENNIALS**
- Blue Flag Iris
- Boneset
- Cardinal Flower
- Great Blue Lobelia
- Monkey Flower
- Joe Pye Weed
- Turtlehead

*good for bank stabilization

**SEARCHABLE PLANT DATABASES ONLINE**

- University of Connecticut:  www.hort.uconn.edu/plants/
- USDA Natural Resources Conservation Service:  plants.usda.gov/index.html
- CT Invasive Plants Working Group:  www.hort.uconn.edu/cipwg/

For information or assistance with a backyard stream, pond or wetland, visit www.conservect.org and contact your local Conservation District today!

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