

# WHAT IS A RAIN GARDEN?

A rain garden is a selection of plants growing in a shallow depression, generally formed on an existing slope. It is designed to temporarily hold and soak up rain water that flows off of roofs, driveways, patios or lawns. They are a simple, cost-effective tool that homeowners, municipalities or others can use to:

-  **Create Beautiful, New Outdoor Space**
-  **Enhance Habitat for Native Plants and Animals**
-  **Reduce Flooding in Streets and Basements**
-  **Recharge Essential Groundwater Resources**  
The water held in a rain garden should infiltrate within 48 hours, preventing the garden from becoming home to mosquitoes.
-  **Trap, Filter and Remove Pollutants**  
Things such as oil, grease, pet waste and fertilizer that get swept from paved areas into storm drains, and eventually our rivers, streams and oceans.

Installing a rain garden can be a rewarding project!

## TOOL LIST

- Shovels
- Rakes
- Gloves
- Wheelbarrow
- Measuring Tape
- Level
- Hammers
- Stakes
- String
- Calculator
- Gravel
- Compost
- Mulch

## CHOOSE YOUR PLANTS

The following list is just a handful of plants, native to New England that could thrive in your garden.



**Butterfly Milkweed** *Asclepias Tuberosa*  
Perennial  
Prefers dry to damp soil (slope/berm)  
Prefers full sun



**Moonbeam Coreopsis** *Coreopsis Verticillata*  
Perennial  
Prefers wet soil (base/center)  
Prefers partial sun or full shade



**Wild Geranium** *Geranium Maculatum*  
Perennial  
Prefers damp to wet soil (slope)  
Prefers partial sun or full shade



**Scarlet Bee Balm** *Monarda Didyma*  
Perennial  
Tolerates most soil moisture levels  
Prefers partial to full sun



**Purple Coneflower** *Echinacea Purpurea*  
Perennial  
Prefers dry to damp soil (slope/berm)  
Prefers partial to full sun



**Tall Switchgrass** *Panicum Virgatum*  
Grass  
Tolerates most soil moisture levels  
Prefers partial to full sun



**American Cranberry** *Viburnum Trilobum*  
Shrub  
Tolerates most soil moisture levels  
Prefers partial to full sun



**Bayberry Bush**  
Shrub  
Prefers damp to dry soil (slope/berm)  
Prefers partial to full sun

For more information and resources,  
visit [www.greenscapes.org](http://www.greenscapes.org)

# RAIN GARDENS

# LET'S GET STARTED...

## 1. SELECT YOUR SITE

Explore your yard. Where does water naturally flow or collect? Avoid soggy areas, and instead try to capture the water before it reaches the wettest places in your yard. Keep the site at least 10 feet from building foundations and downspouts, and 3 feet from sidewalks or driveways.\*\* Refer to START DIGGING Step for other yard obstacles you'll need to avoid \*\*

## 2. CHECK YOUR SOIL

To ensure that your garden will drain well enough to provide a healthy habitat for your plants, you need to know more about your soil.

Dig a hole about 6" deep, 3-4" wide, and fill it with water. After a few hours, come back and fill it up again. After one hour, determine how much lower the water level is. If it has gone down 1.5" or more, the soil is sandy - you're good to go! If it has gone down less than 1.5", the soil is rich in clay or silt. In this case, there are several things you can do to prepare your site :

- 💧 Add a layer of gravel to the bottom of your site
- 💧 Add sand or coarser soils to your soil mixture
- 💧 All gardens will benefit from adding some compost to the mixture; the boost of nutrients will help your plants get established.

## 3. DETERMINE GARDEN SIZE

Time for a little math. To find the ideal size for your garden, you need to determine how much water will be flowing into it.

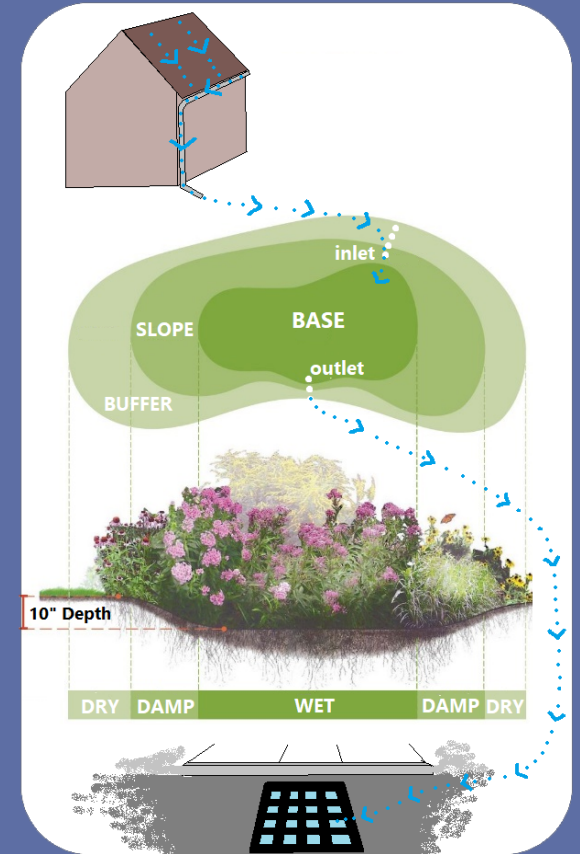
💧 **DRAINAGE AREA** Identify the impervious upstream areas that will drain into your garden. These include driveways, parking lots, sidewalks and roofs. Calculate the surface area (length x width) of each and add them together.

💧 **GARDEN AREA** Divide the total surface area by the garden depth of 8 - 10 inches. This will capture more than 90% of the runoff produced by an inch of rain.

$$\text{Area} = [\text{Surface 1} + \text{Surface 2} + \dots] \div \text{Depth}$$
$$\text{Example} = [(\text{ROOF}) + (\text{DRIVEWAY})] \div 10 \text{ inches}$$
$$= [(20 \text{ ft} \times 20 \text{ ft}) + (20 \text{ ft} \times 10 \text{ ft})] \div 10 \text{ in}$$
$$\text{Rain Garden Area} = 60 \text{ square feet!}$$

## 4. START DIGGING

Now that you know how big your garden needs to be, you're ready to start digging. You'll need to avoid the root zones of trees, and to stay clear of your septic tank and any other utility lines buried in your yard. Call dig-safe at: (888) 344-7233 for help locating your utilities. Is your home in close proximity to a wetland? If so, contact your Conservation Commission for advice on how to safely proceed.



## 5. TIME TO PLANT!

When preparing your garden, try not to walk on the mixed soil, to avoid compaction. After planting, give your garden a generous drink of water. Once established, native plants require little maintenance. Their root systems thrive under local soil conditions. Check the back of this brochure and [www.greenscapes.org](http://www.greenscapes.org) for suggested plants.

