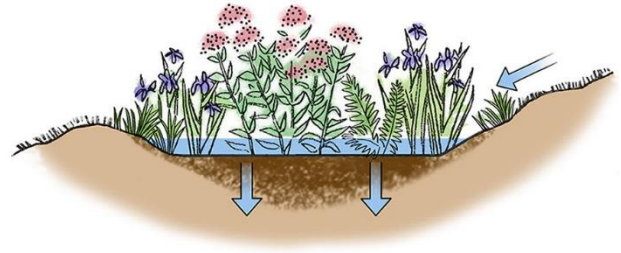


## Maintaining Rain Gardens

A **rain garden** is a garden with a purpose— to soak up rain water! A rain garden is designed as a shallow depression in the ground, planted with native plants, that holds stormwater on site temporarily so that it soaks into the soil rather than running off into storm drains.



Regular maintenance is required to keep your rain garden looking good and functioning properly. Maintenance isn't difficult and a small amount of time invested early in the establishment of the garden will be well rewarded with less maintenance required long term.

Here is what needs to be done to maintain a rain garden (or any other perennial garden):

### Watering

- Year 1 - Consistent watering is needed to allow young plants to develop their deep root systems. The garden should receive water every other day at first. Your watering schedule will be dependent on the weather. Skip watering during rainy weather. During hot weather your garden will require more water. You may have to water every day in times of extreme heat (above 84° degrees F).
- Year 2 - Watering should occur during times of dry weather (no rain in four consecutive days) or if your plants look droopy.
- Year 3 and beyond - By year three your native plants will be well established and can tolerate the weather patterns of Southeast Michigan. You may wish to water during dry periods to keep your plants looking good. Without supplemental watering during dry periods your plants may not bloom or may bloom for a shorter length of time. Water during times of drought (extended dry weather) to prevent the loss of your plants.

### Weeding

When installing a garden, the existing vegetation should be removed completely. After the garden is planted, newspaper can be laid around the plants and covered with an organic mulch to prevent any weeds from popping up in the garden area. The mulch also helps to reduce seeds that may blow into the garden from the surrounding area from taking root. The more diligent the gardener is about preventing weeds, the easier it will be to maintain the garden. Get to know the native plants in your garden so you can more easily identify weeds when they do show up in the garden. A great way to do this is add plant labels to your garden or creating/ updating a garden map of where different plants are planted.

- Year 1 - It is recommended that the garden be inspected for weeds every other week. Weeds should be hand pulled and placed in a yard waste bag or compost bin.
- Year 2 - Regular weeding is recommended. At this stage the plants may still be small. Weeding every 3-4 weeks is appropriate. As the garden fills in, weeds become less of a problem.
- Year 3 and beyond: The garden should be weeded a minimum of 2-4 times a growing season. Strategic timing to remove cool season weeds in late April/early May and warm season weeds in June/July will provide the best results at controlling weeds.

### Edging

To maintain the edge of your garden with a natural or no barrier, use a shovel or edging tool once or twice a year to keep the grass from encroaching into your garden. Between edgings use a weed whip to keep the edge looking clean.



### Rainwater Connections and Gutter Cleaning

An important aspect to maintain is your connection between your garden and watering source. If you have underground tubing hooked up to downspouts, but sure to check at least once a year in early spring or fall to be sure there is no blockages that would prevent water from getting to the garden. This is also important to be sure water isn't being held inside the tubing which could freeze and damage the pipes. Gutter guards or leaf filters can be added to prevent large amounts of leaves from clogging pipes.

### Controlling invasive plants

Invasive plants are non-native plants out compete and completely take over areas where they are present. Because they don't have natural predators (insects or animals that eat the plants) and they spread easily by seed or roots, these plants are a huge problem. There are many resources on the web to help you identify invasive plants. A few good ones are the Midwest Invasive Species Information Network ([www.misin.msu.edu](http://www.misin.msu.edu)), the Stewardship Network ([www.stewardshipnetwork.org](http://www.stewardshipnetwork.org)), and the Midwest Invasive Plant Network ([www.mipn.org](http://www.mipn.org)).



If invasive trees, shrubs, or flowers are identified in your yard or garden, every effort should be taken to remove or kill them. A few invasive species that are commonly found in Detroit are: tree of heaven, *Ailanthus altissima* (tree), garlic mustard, *Alliaria petiolata* (forb/flower), common and glossy buckthorn, *Rhamnus spp.* (shrub/small tree), honeysuckle species, *Lonicera Spp.* (shrub), and common reed, *Phragmites* (grass). Unfortunately additional invasive species make their way into

our area all the time so we need to keep aware of upcoming or new threats.

### **Trimming back herbaceous plants**

The flowers and grasses in your rain garden are perennials, which means they will come back year after year as long as they are cared for. At the end of the growing season the spent blooms and vegetation above ground will die off. This dead plant material will need to be cut back. This can be done in the spring or fall. If you want your garden to provide for wildlife it is best to cut the dead stalks back in the spring. The hollow stalks provide a place for pollinators, like butterflies and solitary bees, to overwinter. The seeds will be eaten by birds and other wildlife during the winter months. Leaving the vegetation until spring also provides winter interest.



### **Planting, Transplanting and Thinning plants**

Fall is an ideal time to move plants to different locations, to divide large plants in half, to remove overgrown plants, and/or to add new plants. After planting or transplanting, water well every other day for 2 weeks or more.

### **Pest control**

Many beneficial insects will be attracted to the native plants in your garden and have developed a beneficial relationship with the plants. Butterfly caterpillars will eat the leaves of the host plant without harming the plant. Diverse landscapes are more resilient to disease. For identifying and controlling insects, plant diseases and other pests, use the MSU Extension website at <http://msue.anr.msu.edu/>.

### **Replenishing mulch**

Fresh mulch should be added every other year or so to retain moisture and prevent weeds. Over time mulch will break down and add nutrients to the soil. A 2 to 3 inch layer of natural, organic, dye-free mulch, such as pine bark, cedar shavings, or other natural material is recommended.

### **Sediment**

Keep an eye out for excess sediment or movement of sediment in the garden after heavy rainfall. If a gully or channel occurs after a rain event, you can fix these issues by adding more mulch, plants, river rocks, or a berm to prevent soils and mulch from washing away. A buildup of sediment could prevent proper drainage in your garden. If a buildup occurs, you can use a flat shovel to remove sediment, but avoid the vegetation.

### **Leave the Leaves**

Fertilizers are unnecessary as rain gardens are designed to absorb excess nutrients and are adapted to local weather and soil conditions. Fallen leaves are also an important habitat for overwintering insects and wildlife. Leaves can either be raked into a pile out of the way or can be raked into your garden for added insulation and winter protection. Avoid putting too thick a layer of leaves over plants as this may suffocate them.