Rain Garden Maintenance
Rain Garden Training for Landscapers
Hartford, CT   November 4-5, 2010

Amy Boyajian
Program Associate
Rutgers Cooperative Extension
Water Resources Program
732-932-9800 ext. 6164
boyajian@envsci.rutgers.edu
http://water.rutgers.edu
Rain gardens are low maintenance gardens, not no maintenance gardens!

Gloucester County DREAM Park

 REQUIRED:

1. Inspecting
2. Watering
3. Mulching
4. Weeding
5. Pruning
6. Harvesting Plants
7. Preparing a Photo Journal

 AS NECESSARY:

1. Re-planting
2. Removing sediment
3. Mowing
4. Soil Testing
5. Cleaning of Gutters
6. Laying down stone and landscape fabric & pins
1. Inspecting

• What am I inspecting for?
  – Weeds and invasive plants
  – Plant health
  – Excessive sediment
  – Movement of sediment within the rain garden

1. Inspecting

• When am I inspecting?
  – Prior to growing season
  – End of growing season
  – After large storm events
  – During weather extremes

Gloucester County DREAM Park
1. Inspecting
Observe the rain garden during rain events and note any problems or successes.

Problem: Gullying after rain event
Solution: Add a berm and/or plants

Maintenance Measures:
Required

1. Inspecting
• Rain Garden Site Visit Worksheet (Post-Installation)
2. Watering

New rain gardens will need to be watered for the first one or two years until the garden is established!

Fanwood Memorial Library, Union County

Soaker hose

3. Mulching

• Apply mulch twice per year until groundcover establishes.

Ulster Municipal Building, Ulster County, New York

Summer Elementary School, Camden County
4. Weeding

- Weeding more often will limit the amount of time you will have to spend weeding.

- Watch for overly-competitive species.

- Some weeds can be aggressively spreading underground by rhizomes.

RCE’s NJ Weed Gallery: http://www.rce.rutgers.edu/weeds

USDA PLANTS Database: http://plants.usda.gov

4. Weeding

Be on the lookout for these invasive species in your rain garden:

- Wisteria

- Japanese Knotweed

Photo by Betty Ann Kelly

Photo by Betty Ann Kelly
4. Weeding
Be on the lookout for these invasive species in your rain garden:

- Thistle
- Wild Cucumber

5. Pruning
- Pruning directs growth of plants, improves health, and increases production of flowers and fruits.

- How does pruning a rain garden differ from my other gardens?
  - In a rain garden, dense shrub growth is encouraged to provide increased filtering capacity.

Photos by Betty Ann Kelly

Hanson House, Union County
5. Pruning

• “Deadheading” plants will also lead to succeeding new growths.
• Tattered and discolored plants should be cut back after spring arrives and growth is 4-6” tall.

• THINNING: basically, thinning out. This type of pruning removes entire branches back to the main trunk or major branches to the ground.
  – Expected result: large, open shrub

• HEADING: also known as heading back. This type of pruning removes only part of a branch.
  – Expected result: growth of multiple branches in place of single branch, thus a more dense shrub.

6. Harvesting Plants

• Collect seeds and cuttings from successful plants in the rain garden and use them for the new season.
• Plant more of the successful species in the rain garden as necessary.
7. Preparing a Photo Journal

Take photographs from the same location for consistency.

Maintenance Measures: Required

1. Re-Planting

- After the first season, it may be obvious what plants were successful and what plants do not work for your rain garden.
  - Over the growing season, was the weather drastically different than the conditions the basin was designed to retain?
  - Was flow too fast through the basin, damaging health?
  - Is flow being incorrectly diverted from the rain garden?
1. Re-Planting

- Replace dead or diseased plant material
- Re-seed the berm if there are areas of exposed soil
- Replace rocks that may be diverting flow out of the garden
- Build up areas where more protection is needed

Hanson House, Union County

2. Removing Sediment

- Since the rain garden serves the purpose of catchment and filtering runoff, sediment will tend to accumulate within the garden.

- This is a sign of success – this sediment would have been directed straight to the local waterways without your efforts!
2. Removing Sediment

• With a flat shovel, remove soil that has accumulated in the basin. Avoid the vegetation!

• There is no exact schedule for when this should be done. Try to monitor sediment accumulation, especially after all heavy storm events.

• Be sure that sediment is not churning up from exposed areas of the rain garden. Flow should be dissipated to avoid these situations, which are likely to occur in the early stages of stabilization.

• Core aerate or cultivate bare areas annually if surface becomes clogged with fine sediments.

3. Mowing

• After the growing season, it will be necessary to remove stems and seedheads. These can be left for habitat and in some areas, aesthetics.

• A string trimmer can be used to maintain over-competitive growths.

• Dead plant materials can also be removed by a string trimmer or mower, if the mowing deck can be raised to cut at 6-8\".
3. Mowing

- Mowing native grasses should occur two times a year in your rain garden.
  - Initial mowing can be done after the first few weeks of growth – early Spring.
  - Final mowing can be completed after ground nesting birds have hatched the next generation usually near mid-May

Rain gardens can provide winter interest!
4. Soil Testing

- Soil should be tested every 3 years.

- pH should be in an acidic range
  - If pH is <5.2, apply limestone
  - If pH is >7.0 to 8.0, add aluminum sulfate or sulfur to reduce pH according to recommendations.

- Soil amendments should only be added when no storms are expected.

- Refer to RCE Fact Sheet 797, download from: [http://njaes.rutgers.edu/pubs/](http://njaes.rutgers.edu/pubs/)

5. Cleaning of Gutters

- Make sure rain gutters are clear of debris.

- If the flow of water is blocked in the gutter, the rain water will have difficulties getting to your rain garden.

Springfield Municipal Building, Union County
6. Laying down stone and landscape fabric & pins

Landscape fabric is secured with landscaping pins under stone to prevent weed growth.

ReBuilder’s Source, South Bronx, New York

Amy Boyajian
Program Associate
Rutgers Cooperative Extension
Water Resources Program
732-932-9800 ext. 6164
boyajian@envsci.rutgers.edu
http://water.rutgers.edu