Rain Gardens

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Rain Gardens

- Definition
- What a Rain Garden is NOT.
- Benefits
- Design
- New Berlin Project
- Why Native Plants?
- My “Why not? Lecture”
Rain Garden Definition

- A **rain garden** is a planted depression that allows rainwater runoff from **impervious** urban areas like roofs, driveways, walkways, and compacted lawn areas the opportunity to be absorbed. This reduces rain runoff by allowing **stormwater** to soak into the ground (as opposed to flowing into **storm drains** and **surface waters** which causes **erosion**, **water pollution**, **flooding**, and diminished **groundwater**). Rain gardens can cut down on the amount of pollution reaching creeks and streams by up to 30%.
Rain Garden Myths

• Rain gardens are not ponds or wetlands. It only holds water for 1-2 days after a rainfall event.

• A Rain Garden is not a breeding ground for Mosquitoes, which need 7-10 days in standing water to reproduce.
Rain Garden Benefits
(the fun part)

- Filter runoff pollution
- Recharge local groundwater
- Conserve water
- Improve water quality
- Protect rivers and streams
- Remove standing water in your yard
- Reduce mosquito breeding
- Survive drought seasons
Rain Garden Benefits 
(the fun part II)

- Increase beneficial insects that eliminate pest insects
- Reduce potential of home flooding
- Create habitat for birds & butterflies
- Reduce garden maintenance
- Enhance sidewalk appeal
- Increase garden enjoyment
Rain Garden Design

- Location
- Soils
- Plants
Rain Garden Location

- At the end of downspouts, but not too near your house.
- Natural Swales
- Where water collects
- Edge of Parking Lots
- Beside Sidewalks
- Your Imagination
Rain Garden Location

At the end of downspouts, but not too near your house.

- Divert Spoutings into Garden. Better yet divert your Rainbarrel overflow into garden.
- Keep 10 ft from house
- Make sure exit of garden is sloped away from house.
- Remember Septic, Utility Lines, etc
Rain Garden Location
Natural Swales

• Use natural swales or contours to carry water to Garden.

• Be careful to make sure you are not delivering too much water to your garden.
Rain Garden Location
Where Water Collects

- Natural Wet Spots
- Where water lays after a storm event.
- Remember a Rain Garden is not a pond.
Rain Garden Location
Impervious Surfaces

• Sidewalk Borders
• Parking Lot Borders
• Your Imagination
Rain Garden Soils

- Perc Test?? Do we want that much work?
- Amended Soil
- Gravel Layer
- Drains
Rain Garden Soils
Perc Test: Do we want that much work?

- Short Answer is NO…
- If we want it to work we can make it work.
- There are benefits in knowing the percolation rate, but we can work around slow rates.
Rain Garden Soils
Amended Soil

• Hundreds of Recipes, I like this one.
• VA Dept of Forestry.
  25% Compost / Leaf Litter
  25% Topsoil
  50% Sand
Rain Garden Soils
Gravel Layer

- Increases Infiltration Capacity
- Creates Voids to Trap Sediments
- The beginning of the “Why not? Lecture”
Rain Garden Soils

Drains

- Lets hope not.
- May be needed if you are capturing too much water.
- I would redesign before I would drain.
Rain Garden Plants
Too many plants, not enough time

• Plants must be tolerant of water and drought. Remember these aren’t ponds.
• Use Native Plants.
• Pick plants based on your design; butterflys, red-white-blue, etc.
New Berlin Rain Garden Project

• A project by the Lower Penns Creek Watershed Association (LPCWA)
• Install Three Rain Gardens near Ballfields in New Berlin Commons
• Targeting Three Erosion Problem Areas.
Native Plants

- More Adapted to Soils and conditions in PA.
- Better Root structure to tolerate both dry and saturated conditions.
- Will not spread and become a nuisance.
The “Why Not? Lecture

- Low Cost
- Low Tech
- Low Maintenance
- High Environmental Impact
- High Visual Appeal
- Highly Reproducible in Many Settings
- They’re “Pretty”
Questions:

My Disclaimer;

I am not an expert in horticulture, gardening, landscape design, well let's face it I am not an expert in anything.

I will try my best to answer any questions, but am not afraid to say “I have no idea”
Questions