Downspout Garden with Compost

Why should I consider a downspout garden? Rain that runs off rooftops, driveways and even compacted lawns carries oil, dirt, trash and other pollutants with it as it travels down into storm drains. This runoff eventually makes its way to our waterways.

Often, traditional lawns aren't grown on good quality soils and over years of use, especially in high traffic areas, they become compacted. Compacted lawns don't allow water to infiltrate. Adding compost and native plants can improve the health of the soil and increase its ability to infiltrate water, reducing runoff.

Why focus on the area near my downspout? The best place to improve or amend the soil if you are looking to reduce runoff from your property and increase infiltration is in the area near your downspout. Your roof is likely one of the largest hard or impervious surfaces on your property and it creates a lot of runoff during a storm. A 2,000 ft^2 rooftop can generate 1,247 gallons or more than 30 bathtubs worth of runoff during a 1inch storm! Amending the soil with compost in a small 25 ft^2 or larger area where rainwater from your roof discharges can help some of that water soak into the ground and prevent runoff.

How do I determine if my yard can benefit from a downspout garden?

You can do a simple infiltration test. Dig a hole 6-12 inches deep and at least four inches wide in the area where your downspout drains to. Fill the hole with water and let it stand for one hour to pre-soak the soil for your test. Then fill the hole back up with water and measure the depth of the water with a ruler. After one hour, measure the depth of the water again and subtract this value from the starting measurement to determine your infiltration rate. If your infiltration rate is less than 3 inches/hour adding compost and native plants will likely improve infiltration. If your 6 inch deep hole is empty after 2 hours you have good drainage, but you may want to consider building a rain garden at least 10 ft. from your foundation to collect even more roof runoff.

What type of compost should I use?

A good quality compost made from yard waste. If purchasing compost consider asking whether the supplier monitors temperature, moisture, oxygen and microbial activity to ensure it's high quality and doesn't contain weed seeds. The compost should be dark in color and should not contain debris such as sticks or garbage. For more information on compost quality and regulations visit https://dnr.wisconsin.gov/topic/Recycling/use.html.

Downspout Garden Steps:

1. Call Digger's Hotline- 811 or fill out an online request form at www.diggershotline.com to get utility lines marked before planning your garden location and digging.
2. Measure out a 25 ft^2 (or larger) area near the end of your downspout. Make sure your downspout will discharge at least 5 feet away from the house foundation and the land slopes away from your home. You may need to extend your downspout or attach flexible tubing to discharge to the desired garden area after planting.

3. If sod or weeds are present either smother with cardboard or black plastic until vegetation dies. The other option is to remove the sod with a sod cutter. You can replant the sod after if not replacing with native plants.

4. Dig up/loosen soil to a depth of 6inches.

5. Remove about half of the loose soil.

6. Replace the removed soil with an equal amount of compost (approximately 6 ft^3 for a 25ft^2 garden) and mix in well, making sure it's broken up and well incorporated.

7. Spread out soil/compost mix evenly. Make sure garden bed slopes away from the foundation. Consider adding newspaper or cardboard to reduce weed competition (optional).

8. Plant native plants, seed or replace sod.

9. If using seed or native plants make sure to cover the area with straw/mulch to protect the soil.

10. Remember to water newly planted area regularly until plants are established.

11. Direct the downspout away from the area initially if using seeds or you have small seedlings.

12. Once plants are established reconnect downspout so it drains at least 5 ft. from foundation.