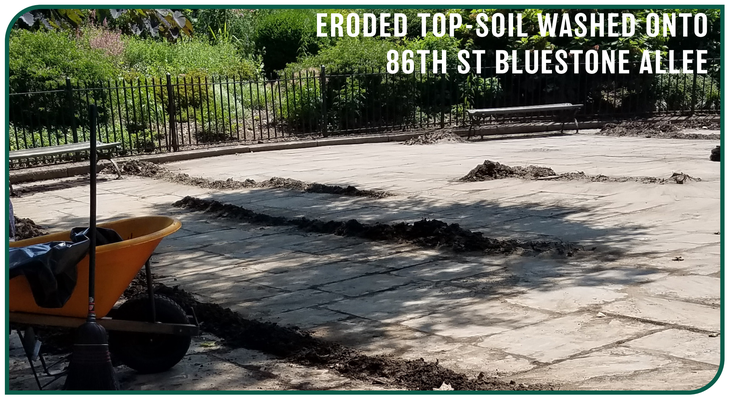
Carl Schurz PARK Conservancy



Soil & Stormwater

FACTS

Soil is the foundation for most land-based ecosystems. But not all soil is the same.

Different types of soil support particular types of plants and underground organisms. For instance, some thrive in wet, clay soil, while others prefer fast-draining, sandy soil. Well-draining soil is very important for urban areas, where it absorbs contaminated stormwater and prevents flooding.

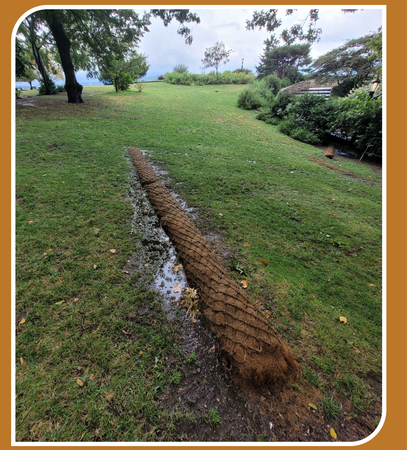
- Soil is generally a mix of silt, sand and clay particles.
- Soil contains organic nutrients, gases, water and microorganisms that enable plants to thrive.
- Soil is home to some of the most beneficial creatures on Earth, like fungi and earthworms.
- The park's soil is slightly acidic, which supports a wide range of plants.

Did you know?

- In one teaspoon of soil, there can be more microorganisms than the number of people on Earth.
- Scientists are studying soil microorganisms that have potential to cure drug-resistant bacterial diseases.

FOCUS

At Carl Schurz Park, some of the soil is natural, and some was transported here during construction. Over time, with the addition of new plants and compost, the park is now considered to have healthy garden soil. Here are two of its features:



THE BIG SPONGE

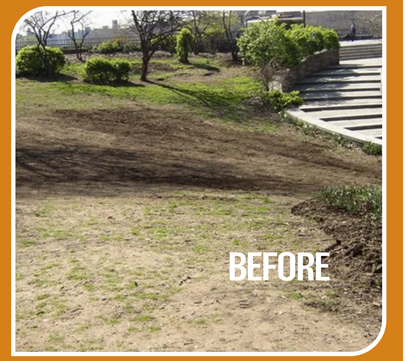
When it rains, the park's soil acts like a sponge, absorbing and filtering stormwater. For the soil to do this effectively, it needs to be porous so that water can move through. By de-compacting soil in heavily trafficked areas, using erosion-control measures, and adding compost, we have soil that holds onto rain that falls in the park and keeps contaminated runoff out of the East River.

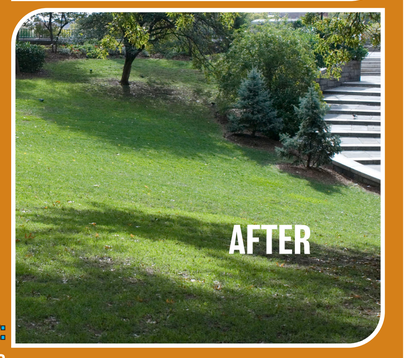
EARTHWORMS

Earthworms play a vital role in building good soil. Their burrows facilitate the movement and storage of water and create space for roots to grow. Their excretions provide a kind of super-fertilizer while their secretions encourage the growth of beneficial bacteria and fungi and can clean soil of toxic pollutants.

FUTURE

Compaction and erosion present the biggest challenges we face. Running dogs destroy roots and kill grass. Foot traffic compacts the soil so that it is unable to absorb stormwater or support life. Storms and wind cause these barren areas to erode. The patches of dirt you see on the lawns are evidence of these issues.





To address these challenges the Conservancy is:

- installing cribbing logs on sloped areas to prevent erosion. We use tree limbs or coir logs made of biodegradable coconut fiber.
- mulching highly trafficked pathways to cushion the ground.
- aerating and seeding lawns twice yearly.
- temporarily closing lawn areas for restoration.
- leaving fallen leaves to improve soil and feed earthworms.
- adding compost to enrich depleted soil.
- never using commercial fertilizers or weedkillers.

Steps you can take to join in the effort:

- **Use compost instead of commercial fertilizers to avoid contaminating water supplies.**
- **Protect planted areas from foot and dog traffic.**
- **Leave fallen leaves to improve soil.**

DISCOVER MORE: