



# #PlantsDoThat For Soil Health!

Soil and plants go hand in hand, working together to benefit OUR environment

## Soils are Alive

Soils are filled with plant roots, bugs, earthworms, bacteria, fungi – a whole ecosystem underground!<sup>1</sup>

## Pores are Important!

Ideal soils are half solids (minerals & organic matter) and half pore spaces (filled with air or water). Hard, compacted soil have lost pore space due to compression. Plant roots need oxygen, water and space to grow.<sup>4</sup>

## Organic Matter is Key

Organic matter is decomposed plants that holds nutrients and water, loosens the soil, and feeds life in the soil. Add OM regularly to your soil.<sup>2</sup>

## What Plants Need!

Healthy soils provide adequate water and nutrients to plants and protect against losses to runoff water and erosion.<sup>5</sup>



## Plants Build Soil

Build soil health by providing organic matter and improving soil fertility.<sup>6</sup>

## Keep Your Soil Covered

Having plants on the soil surface prevents erosion, soil crusting, compaction and reduces weeds.<sup>3</sup>

## Urban Soils Hold Many Surprises

Soil is often changed during construction: graded, filled, compacted, and contaminated. It is good to know what is beneath you. Know the history and plant accordingly!<sup>7</sup>

This infographic was produced by the NICH Environmental Committee: Lauren Garcia Chance, Amy Jo Detweiler, Gail Langellotto, Carl Evensen, Allison Gault, Sarada Krishnan, Julie Weisenhorn, Sabrena Schweyer. Design provided by the Horticultural Research Institute.

<sup>1,2,3,4,6</sup>National Resources Conservation Service. ND. Soil Health. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/> (accessed October 26, 2019)

<sup>7</sup>Scheyer, J.M., and K.W. Hipple. 2005. Urban Soil Primer. United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska (<http://soils.usda.gov/use>). (accessed October 26, 2019)

### Additional Resources

Growing and Sharing – Healthy Soil website: [https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/soils/health/?cid=stel-](https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/soils/health/?cid=stel-prdb1143028)

[prdb1143028](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/health/?cid=stelprdb1143204) (accessed October 26, 2019)

Healthy Soil Info-graphics: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/health/?cid=stelprdb1143204> (accessed October 26, 2019)

Soil Health for Educators: [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=nrcs142p2\\_053870](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=nrcs142p2_053870)(accessed October 26, 2019)

Soil Quality Indicator Sheets: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=stelprdb1237387> (accessed October 26, 2019)

Soil Quality Test Kit – Background and Interpretive Guide to Individual Tests:

[https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052490.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052490.pdf)

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