

Methods to Determine Soil Type

Introduction

There are many different ways to determine soil type. The soil test methods listed below are for your reference when designing a rain garden. Soil type is an important consideration when selecting plants as well as in sizing for the optimum rain garden. In reality there are many different soils that infiltrate water at different rates. To simplify designing your rain garden, soils are considered to be one of two types: sand or clay. Sands have the capacity to drain lots of water quickly while clays do not. The soil test methods listed below will help you assess your soil characteristics. For the purposes of sizing your rain garden it is assumed that soils more closely fitting sandy characteristics would use the sand sizing criteria and other soil types would use the clay sizing criteria.

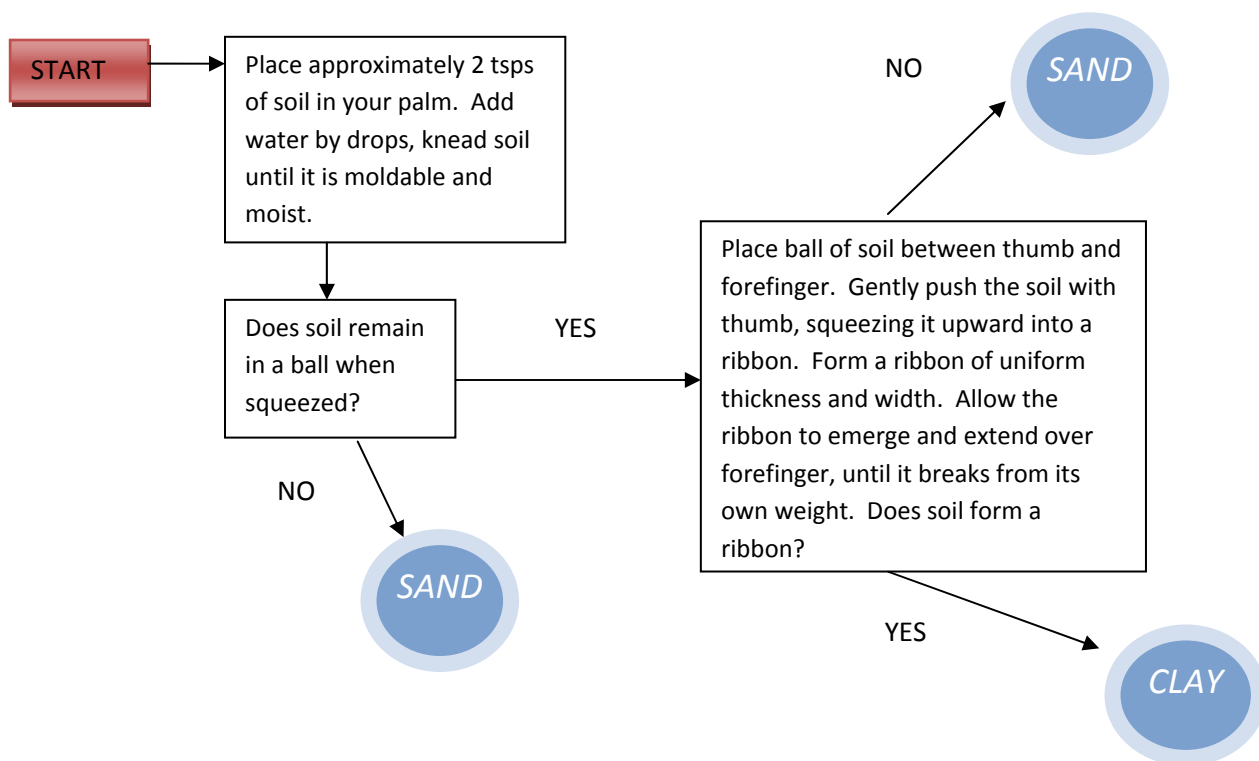
Digging a hole test:

You can test the infiltration rate of your soil with a simple test:

1. Dig a hole at least 1' deep and 6" in diameter near or at the site you want to have your garden. .
2. Fill the hole with water three times and allow it to thoroughly saturate the surrounding soil.
3. Fill the hole with water a fourth time and observe how long it takes the water to soak into the ground.
4. Check back in 12 hours. Check the depth of water remaining in the hole. If the water has mostly drained from the hole then the soil has an acceptable infiltration rate and you can assume the soil type is similar to sand. If water still remains in the hole consider assuming the soil type is clay. The water should drain at a rate of about 1 inch per hour for sandy soils.

Adapted from: "Rain Gardens of West Michigan" http://raingardens.org/docs/Create_A_Rain_Garden.pdf

SOIL TEXTURE FEEL TEST



SOURCE: Adapted from WOW (The Wonders of Wetlands, Environmental Concern, Inc.) featured on University of Wisconsin.