

Soils

Hood River County has about 30 different kinds of soil. While most of the soils in the Hood River Valley are good for growing a variety of crops, a soil survey and a soil test can be very useful tools for learning how best to use and manage your land.

The Dirt on Soil

Soils are developed over geologic time. Climate, water, temperature, vegetation and parent materials all contribute to soil formation. Parent material can include bedrock, volcanic ash and glacial outwash.

Soils are complex and fragile. They are susceptible to erosion by wind and water when not adequately protected. Soils form the basis of most ecosystems, including our own. Without productive soils we would not be able to grow the plants we need to survive.

Soils have different textures including silts, sands and clays. The combination of these textures determines the characteristics of your soils. The depths of the soil to bedrock or a water table are factors that can determine how land is used. The steepness of slope and its aspect can also affect soil stability and sustainability.

The Hood River County soil survey is a great place to start when you want to know more about the soils that make up your land. The Soil Conservation Service (now the Natural Resources Conservation Service (NRCS)) completed a soil survey of Hood River County in 1981. This survey includes most of Hood River County, but does not include the Cascade Locks area or any of the National Forest land. These free surveys are available to landowners at your Hood River SWCD or OSU Extension Service offices. There is also an interactive web-based soil survey available through the NRCS at <http://websoilsurvey.nrcs.usda.gov>.

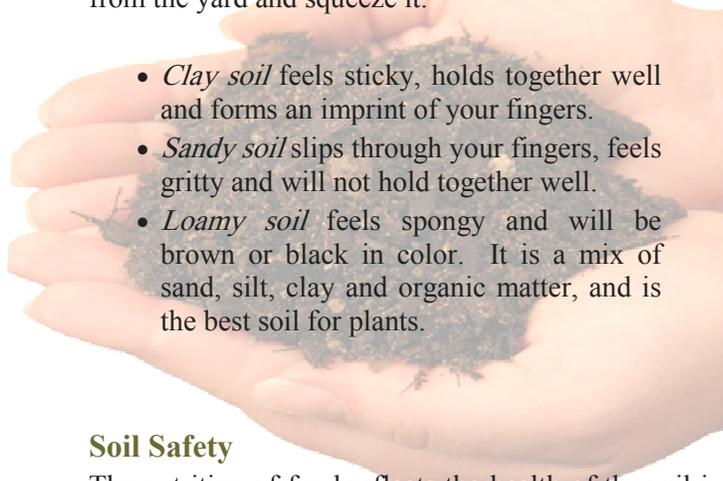
Did You Know?

It can take up to 500 years for natural processes to create one inch of top soil, and under the wrong conditions, one storm to remove it. Civilizations have been lost because soil sustainability was either not understood or practiced.



If you don't have a soil survey, a quick way to determine your soil type is to get a hand full of moist soil from the yard and squeeze it.

- *Clay soil* feels sticky, holds together well and forms an imprint of your fingers.
- *Sandy soil* slips through your fingers, feels gritty and will not hold together well.
- *Loamy soil* feels spongy and will be brown or black in color. It is a mix of sand, silt, clay and organic matter, and is the best soil for plants.



Soil Safety

The nutrition of food reflects the health of the soil in which it is grown. Soils (and crops) can be contaminated by bacteria and other elements such as lead and arsenic. These chemicals can occur naturally in soils but are potentially toxic at high concentrations. The soil in the vegetable garden and in areas where children might inadvertently consume it presents the greatest risk.

Past human activities have increased the lead and arsenic content of some soils, particularly those around older homes containing lead-based paints, along roadways and in former orchard sites. Many parts of the Hood River Valley, including many subdivisions, were planted in orchards in the early 1900s and were likely treated with lead and arsenic sprays to control fruit pests. Soil testing can confirm higher than natural background concentrations and should be done by landowners who suspect their garden plot may have been exposed to lead or arsenic.

Soils Testing

Not only can soil testing reveal high levels of contaminants, it can also provide information on the available nutrient content of your soil. The test can help guide you in choosing the right amendments to improve the soil. The Hood River SWCD and OSU Extension office can provide a list of soil testing labs where soil samples can be examined. The OSU Extension staff can help you interpret your test results.

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