



# Estimating Soil Moisture by feel and appearance



Before using this method, determine soil texture by feel method. See soil section of <http://eafghanag.ucdavis.edu>

The method below comes from: the NRCS Guide “Estimating Soil moisture by feel and appearance”

Avail. Soil Water - Moisture level	Fine Sand – Loamy fine sand	Sandy Loam – Fine sandy loam	Sandy clay loam, loam, silt loam	Clay, clay loam, silty clay loam
<b>0-25% Dry</b>	Loose, will hold together if not disturbed, loose sand grains on fingers with applied pressure.	Forms a very weak ball*, aggregated soil grains break away easily from ball.	Soil aggregations break away easily, no staining on fingers, clods crumble with applied pressure.	Soil aggregations separate easily, clods are hard to crumble with applied pressure.
<b>25-50% Slightly moist</b>	 <p>Forms a very weak ball with well- defined finger marks, light coating of loose and aggregated sand grains remains on fingers.</p>	 <p>Forms a weak ball with defined finger marks, darkened color, no water staining on fingers, grains break away.</p>	 <p>Forms a weak ball with rough surfaces, no water staining on fingers, few aggregated soil grains break away.</p>	 <p>Forms a weak ball, very few soil aggregations break away, no water stains, clods flatten with applied pressure.</p>
<b>50-75% Moist</b>	 <p>Forms a weak ball with loose and aggregated sand grains on fingers, darkened color, moderate water staining on fingers, will not ribbon.</p>	 <p>Forms a ball with defined finger marks, very light soil/water staining on fingers, darkened color, will not slick.</p>	 <p>Forms a ball, very light staining on fingers, darkened color, pliable, forms a weak ribbon between the thumb and forefinger.</p>	 <p>Forms a smooth ball with defined finger marks, light soil/water staining on fingers, ribbons between thumb and forefinger.</p>
<b>75-100% Wet</b>	 <p>Forms a weak ball, loose and aggregated sand grains remain on fingers, darkened color, heavy water staining on fingers, will not ribbon.</p>	 <p>Forms a ball with wet outline left on hand, light to medium staining on fingers, makes a weak ribbon between the thumb and forefinger.</p>	 <p>Forms a ball with well-defined finger marks, light to heavy soil/water coating on fingers, ribbons between thumb and forefinger.</p>	 <p>Forms a ball, uneven medium to heavy soil/water coating on fingers, ribbons easily between thumb and forefinger.</p>

\* A weak ball falls apart with two to three bounces on the hand, whereas a very weak ball falls apart with one bounce.

Prepared by Maria P. Santibanez and Mark Bell, 2012, from NRCS Guide “Estimating Soil moisture by feel and appearance” Program Aid Number 1619 - 1998

Reference: NRCS Montana <http://www.mt.nrcs.usda.gov/technical/ecs/agronomy/soilmoisture/index.html>

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