

Using the Hand Feel Method to Determine Turfgrass Irrigation Needs

By understanding how soil moisture and climatic factors affect water use by the plant, you can develop a program to effectively maintain turfgrass quality without overwatering.

Hand Feel Method

This is based on visual observations and feeling the soil. The sample is obtained by using a small soil auger to core soil at different depths. The soil is squeezed and fashioned into a ball. If it forms a ball, lightly bounce it in the palm of your hand. If free water appears, available water is greater than 100%. If upon squeezing, no free water appears but a wet outline of the ball is left, available water is 100%.

For available water values between 75 and 100%, a sandy soil will tend to stick together slightly and sometimes will form a weak ball with pressure. At less than 75% water, sandy soils will not form a ball.



Fig. 1. Hand feel method with free water appearing.

Climatic Factors

Recent trends in the irrigation industry have included the use of on-site weather stations. These inexpensive stations can be set up on your property to measure the specific inputs that your turf areas receive. The station can auto correct for rain, wind and also the amount of direct sunlight received. The weather station then corrects the programmed values for your system. Or it can give you an update that can be used in conjunction with your water requirements if you are manually watering the turf areas.

Turfgrass plants are under intense management and require irrigation to remain productive and produce an acceptable turf stand. Techniques such as the hand feel method will help to decide when to irrigate.

Funding for the publication of this factsheet was provided through the Canada-Nova Scotia Water Supply Expansion Program (CNSWSEP), an initiative under the federal-provincial-territorial Agricultural Policy Framework.

For more information, please check our website at www.turfgrass.ca

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