

SHAP Ground-Truthing Project

Supporting Ontario's SHAP Tool



WHY SAMPLE

This project will help to set a Soil Health Benchmark on your field.

You will receive a Soil Health Report, which will support your ability to make management decisions based on data.

You will also be helping to build a larger provincial soil health database.



WHEN IS THE BEST TIME TO SAMPLE?

There is no right time to sample.

However, it is important to pay attention to the conditions when the sample was taken, as seasonal considerations can impact how results are interpreted.

Soil health samples are most ideal in early summer when soil moisture conditions are most likely to be suitable for in-field assessments. However, it may be more convenient to sample at other times of year.

It is important to be consistent with the timing of your sample from one year to the next so results can be comparable.

Avoid sampling 4-6 weeks after a soil disturbance, like tillage, or the application of fertilizer or manure. Also, avoid extreme conditions.



HOW TO SAMPLE?

(To be done after completing Steps 1 & 2 of the 4-step process)

COLLECT

15-20 core samples to a 6-inch depth with a soil prob from within a 3 m radius. A shovel can also be used by slicing a V then remove a sliver from one side - always trying to get 6" deep. Place soil into clean pail. REMOVE surface debris and extract cores. PLACE cores into a clean pail. Gently break and mix the cores. TRANSFER ~500 ml (2 cups) of soil into bag(s). Put bags into containers. Label. Store in cool place.

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WHERE TO SAMPLE?

Find a relatively small and uniform area based on:

PERFORMANCE

Inconsistent yields	often from moisture fluctuations
Below average yields	may have issues of compaction, erosion or low organic matter
Average yields	broadly representative
High yields	may represent best potential of similar soils in the field; can be compared against low- or average-yielding areas



TOPOGRAPHY (slope)

Lower	water flows to / accumulates in these areas; often poorly drained unless tilled
Mid	intermediate crop productivity
Upper	generally drier areas; knolls and shoulder slopes likely eroded and at high risk tillage erosion

DATA

good yield index maps, soil property maps, or reliable management zones to can help you select an area