

# Soil Health Assessment and Plan (SHAP) Tool

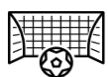


SOILS AT GUELPH

## Quick Guide - how to decide where to sample

### 1 MAKE A GOAL

Are you trying to:



"Benchmark" to identify and track trends?  
Compare good and poor areas of the field?

Determine limitations and risks to soil productivity?

### 2 CHOOSE A FIELD to support your goal

Some considerations:



NEW or newly improved fields are great for benchmarking and tracking impact of soil health management practices over time

POOR fields that consistently under-perform can help identify issues

AVERAGE fields make the results of the assessment broadly applicable to the rest of the farm operation

GOOD fields that consistently over-perform can provide a target to aim for when evaluating "poor", "average" or "new fields with similar soils."

### 3 CHOOSE A LOCATION 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 tiled

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

### 4 TAKE, BAG, LABEL and SHIP A SAMPLE (Steps 4 - 6 in Procedure Quick Guide) COLLECT 15-20 core samples to a 6-inch depth from within a 300 square foot in your sampling area. This is roughly a circle with a radius of 3 meters



REMOVE surface debris and extract cores. PLACE cores into a clean pail. Gently break and mix the cores. TRANSFER into standard soil sample containers. Double bag. Box. Label. Ship.