

Soil structure scorecard

For sandy loam and loam textured topsoils in Tasmania

This scorecard complements that for clay loam textured topsoils

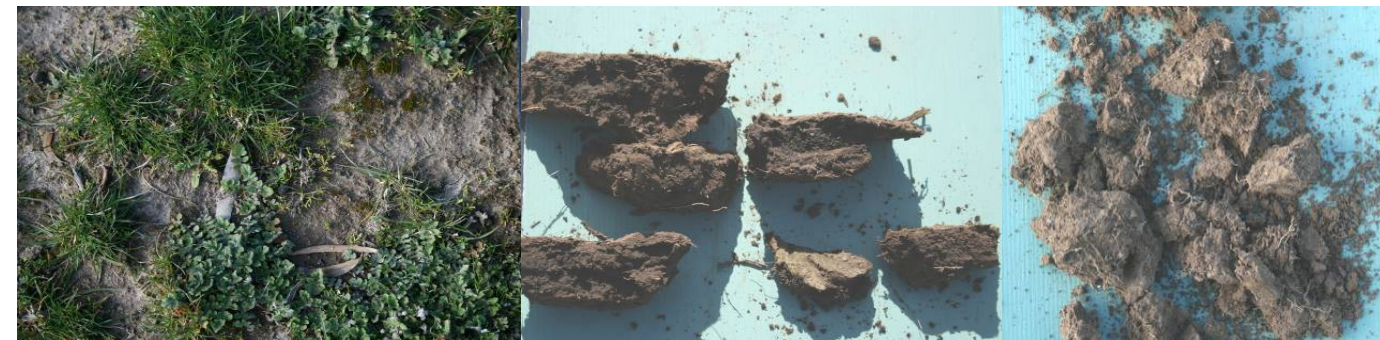


Score 1 – 2

Soil is hard to dig; smooth surface with crusting visible. Water ponding frequent.

Large compact clods (50 – 100 mm) with few fine aggregates. Clods are angular, plate-like and with smooth sides and no pores.

Common in gateways and on headlands



Score 3 – 4

Can have a crust at the surface following sealing by rain.

Many firm medium clods (20 – 50 mm) that are angular with smooth faces and no pores. Clods and overworked soil break into loose powdery soil.

Can be caused by deep mixing of bleached subsoil with topsoil. Common in wheel tracks, on headlands & heavily cropped paddocks.



Score 5 – 6

Surface shows some crusting, often caused by stock trampling.

Many medium firm aggregates (5 – 30 mm) with **few fine aggregates** (< 2 mm) and some powdery unaggregated soil.



Score 7 – 8

Rough surface, often broken by crop stubble and other plant residues.

Many medium (5 – 20 mm) **and fine** (< 2 mm) **aggregates**. Aggregates are friable and rounded. Soils are cropped intermittently.

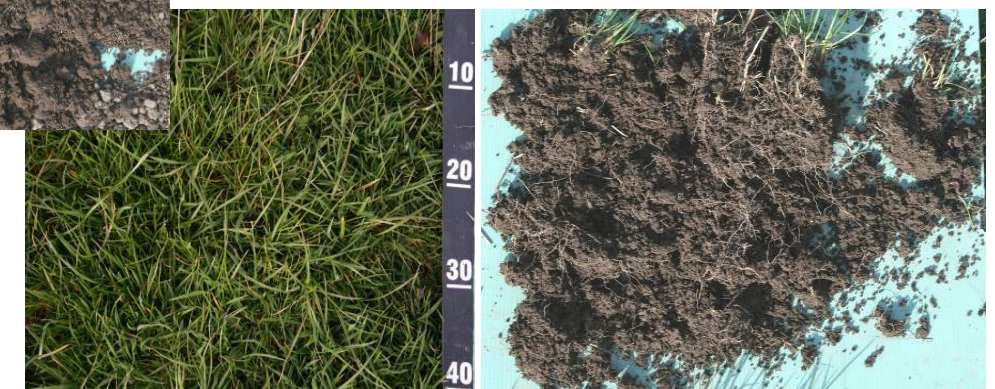


Score 9 – 10

Many fine aggregates (2 – 10 mm) which are irregular shaped or rounded. Soil is loose and porous. Aggregates have rough surfaces with many holes for good aeration and drainage.

Little or no powdery unaggregated soil.

Soils have abundant very fine roots and are mostly under perennial pasture.



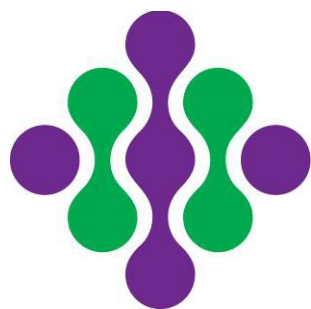
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Method

1. Use a spade to dig a hole approximately 300 mm square to the base of the topsoil.
2. Take a 50 mm wide vertical slice of topsoil from the edge of the hole.
3. Place soil on a clean surface, such as a fertiliser bag.
4. Use your hands to break the slice of soil apart, noting the force required and the resulting clods or aggregates.

Helpful hints

- The scoring should be done quickly, rather than agonizing over subtle differences.
- Sample 3 or 4 sites in each paddock.
- It is better to do several quick scores in a paddock than to labour over one score.
- It helps to carry with you soils with different scores for comparison (eg. In an ice-cream container).
- Compare the soil in the paddock with soil from under the fenceline.
- You can put some soils in 'storage' for comparison in a year or two,
to see if your soil structure has changed.



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