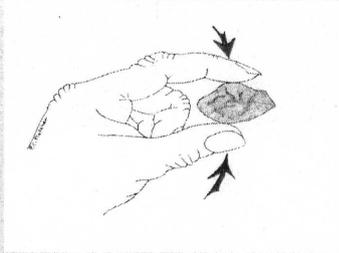


Soil Consistence

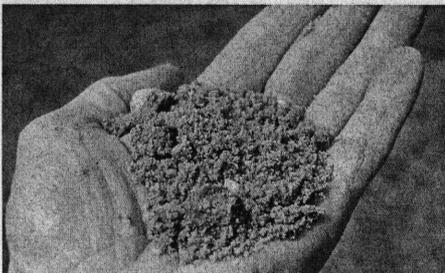
The resistance of a clod of soil to being crushed



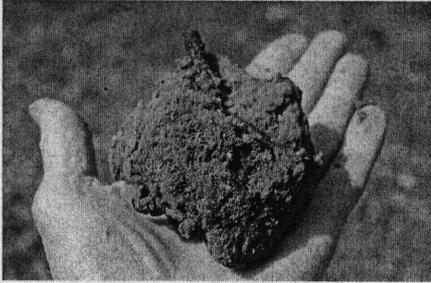
Terms used to describe Soil Consistence

- Loose
- Very friable
- friable
- Firm
- Very firm
- Extremely firm

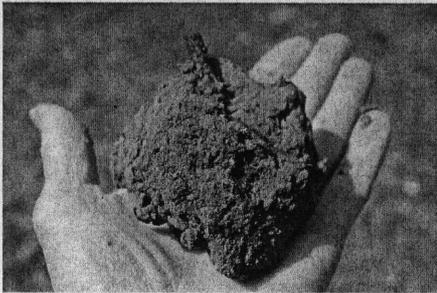
- Loose: Soil falls apart when removed from the pit face, sands and gravelly



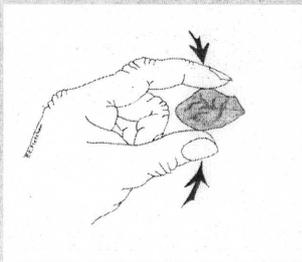
Very Friable: A clod of soil crumbles under very slight pressure



Friable: A clod of soil crumbles under slight to moderate pressure



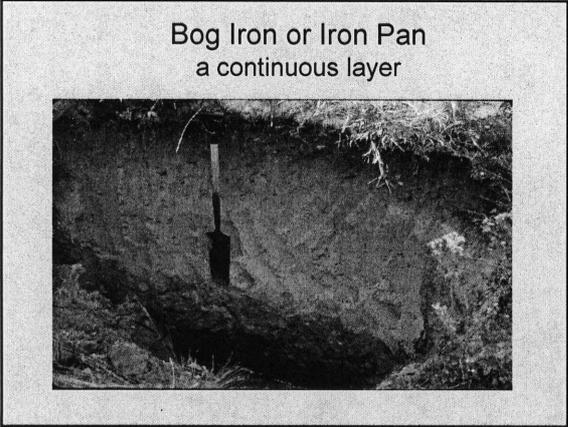
When squeezed between one's thumb and index finger -



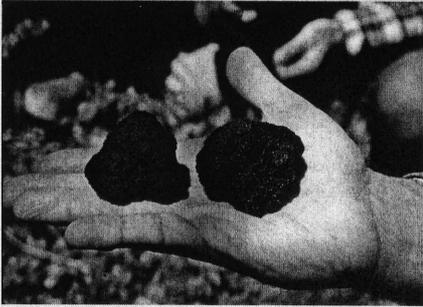
- **Firm:** There is noticeable resistance to crushing
- **Very Firm:** Strong force is needed to crush the soil
- **Extremely Firm:** Cannot be crushed using one's fingers and both hands are needed

Cemented Soil

- Hard or very hard mass of soil
- Accumulation of Iron and manganese oxides that fills the pores between soil particles and cements the soil particles together.



Nodules and/or Concretions
cemented areas within the soil

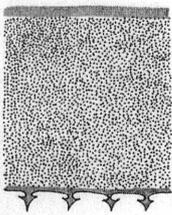


Soil Structure

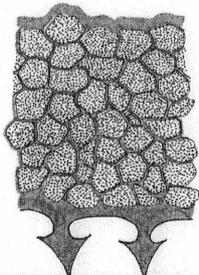
The natural arrangement of
individual soil particles into
larger aggregates of soil
particles.

SOIL STRUCTURE

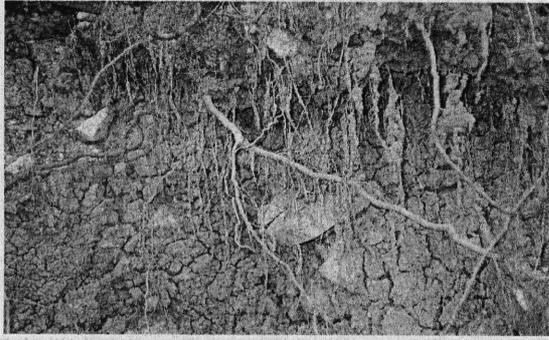
SILT LOAM
MASSIVE -STRUCTURELESS



SILT LOAM
BLOCKY STRUCTURE



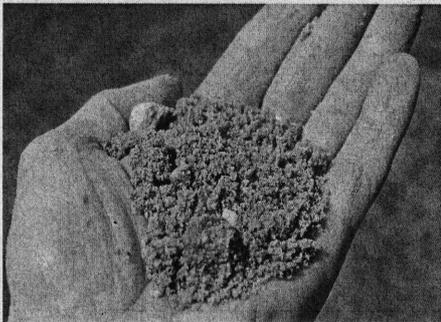
Blockly Structure

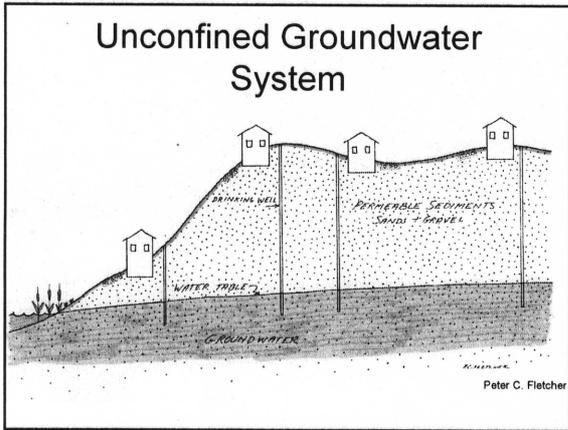


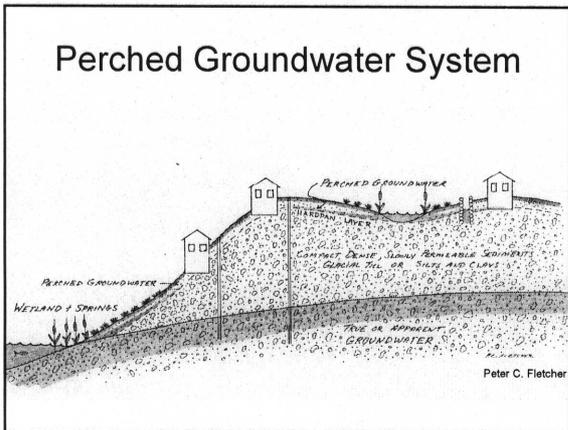
Structureless soils

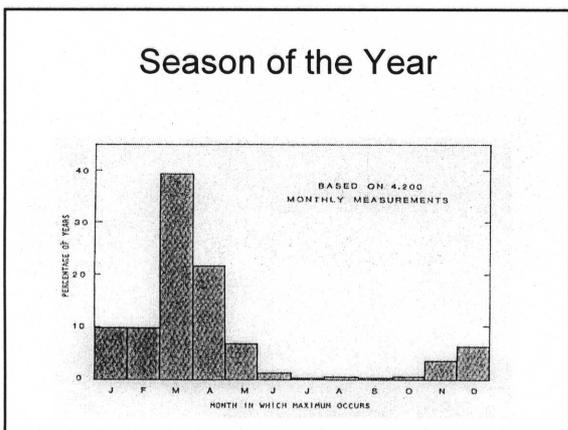
Soils that do not have structure are either single grain or massive.

Single Grained Soil

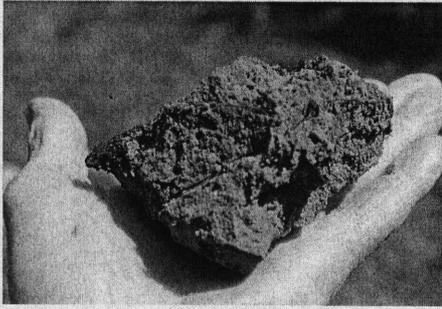








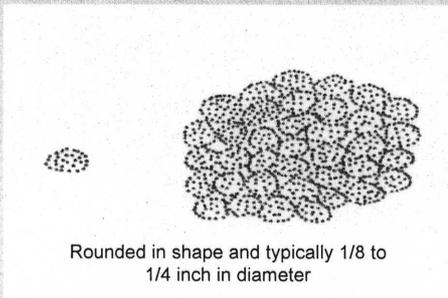
Massive Soil



Describing Soil Structure

- Shape
- Size
- Grade (degree of distinctness)

Granular Structure

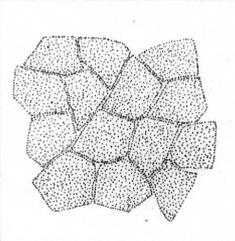


Rounded in shape and typically 1/8 to 1/4 inch in diameter

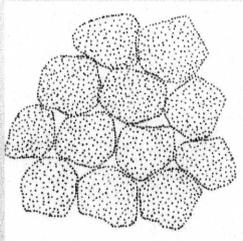
Granular Structure



Blocky Structure

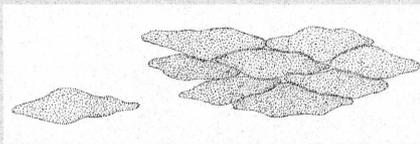


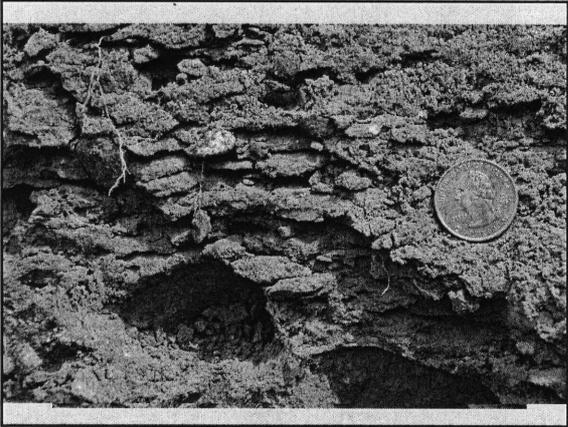
Angular Blocky

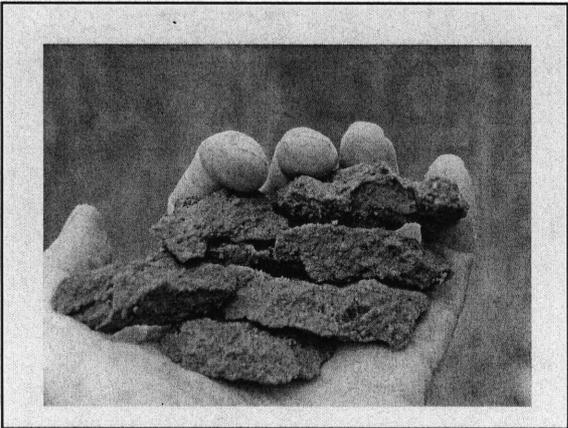


Subangular Blocky

Platy Structure





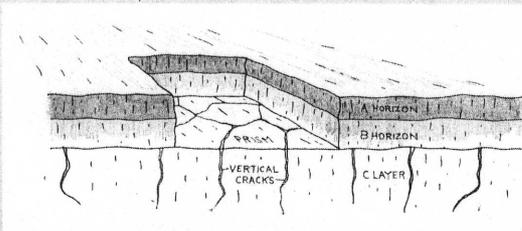


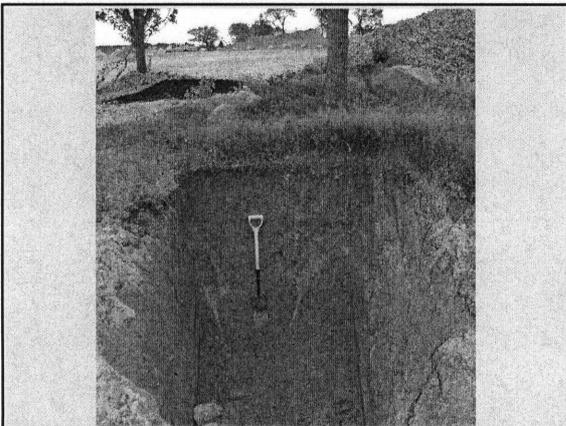


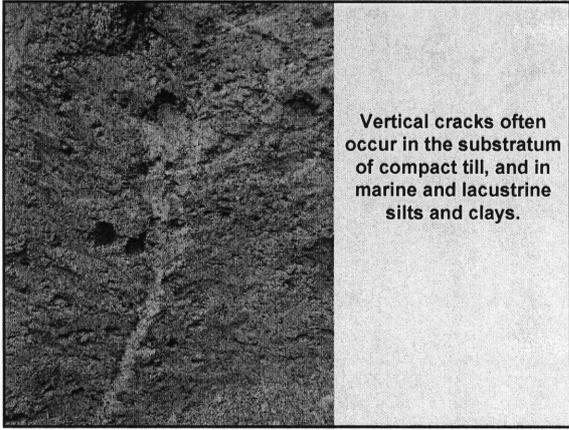
Platy Structure Caused by Mechanical Compaction (heavy equipment)



Prismatic Structure







Vertical cracks often occur in the substratum of compact till, and in marine and lacustrine silts and clays.
