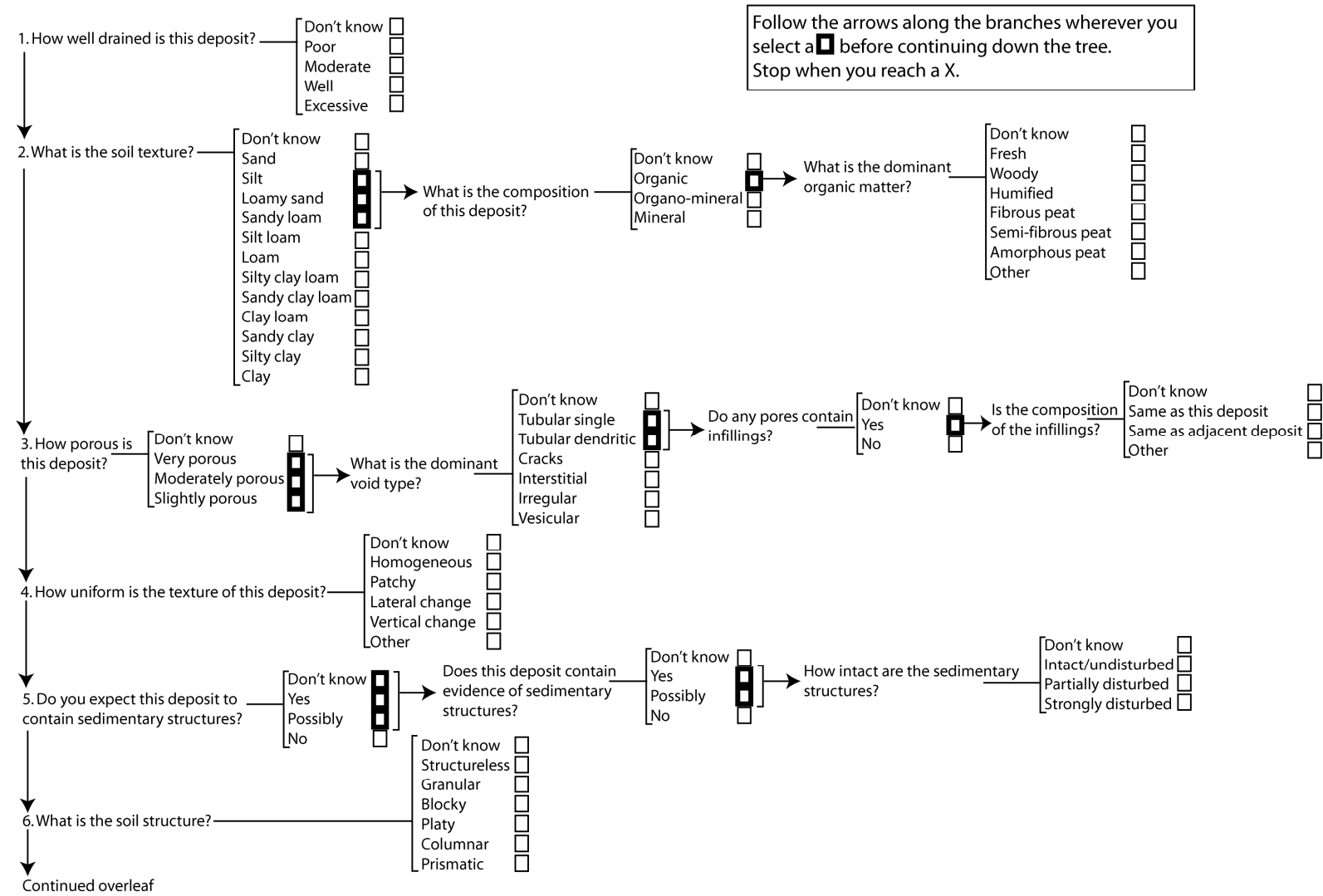


# Has this deposit been affected by bioturbation?



Follow the arrows along the branches wherever you select a  before continuing down the tree. Stop when you reach a X.

Has this deposit been affected by bioturbation?

Continued

7. How distinct is the upper boundary?

Don't know  
 Diffuse  
 Gradual  
 Clear  
 Abrupt  
 Sharp  
 Absent

What is the shape of the upper boundary?

Don't know  
 Smooth straight  
 Smooth inclined  
 Wavy  
 Irregular  
 Broken

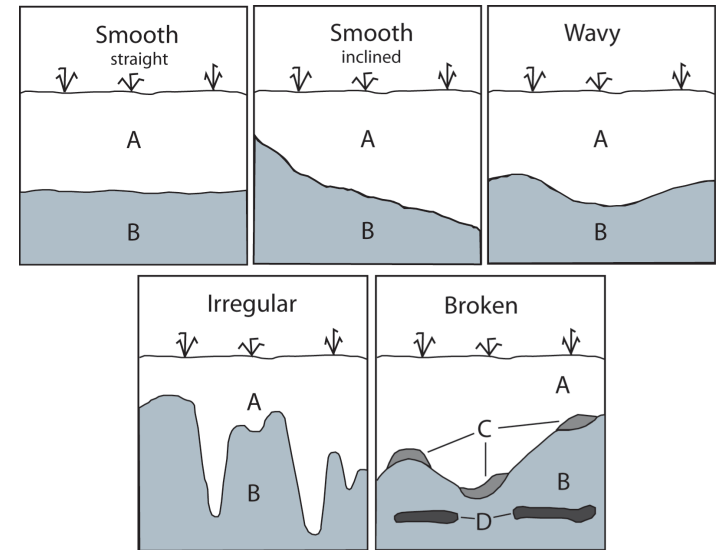
8. How distinct is the lower boundary?

Don't know  
 Diffuse  
 Gradual  
 Clear  
 Abrupt  
 Sharp  
 Absent

What is the shape of the lower boundary?

Don't know  
 Smooth straight  
 Smooth inclined  
 Wavy  
 Irregular  
 Broken

### Boundary shape

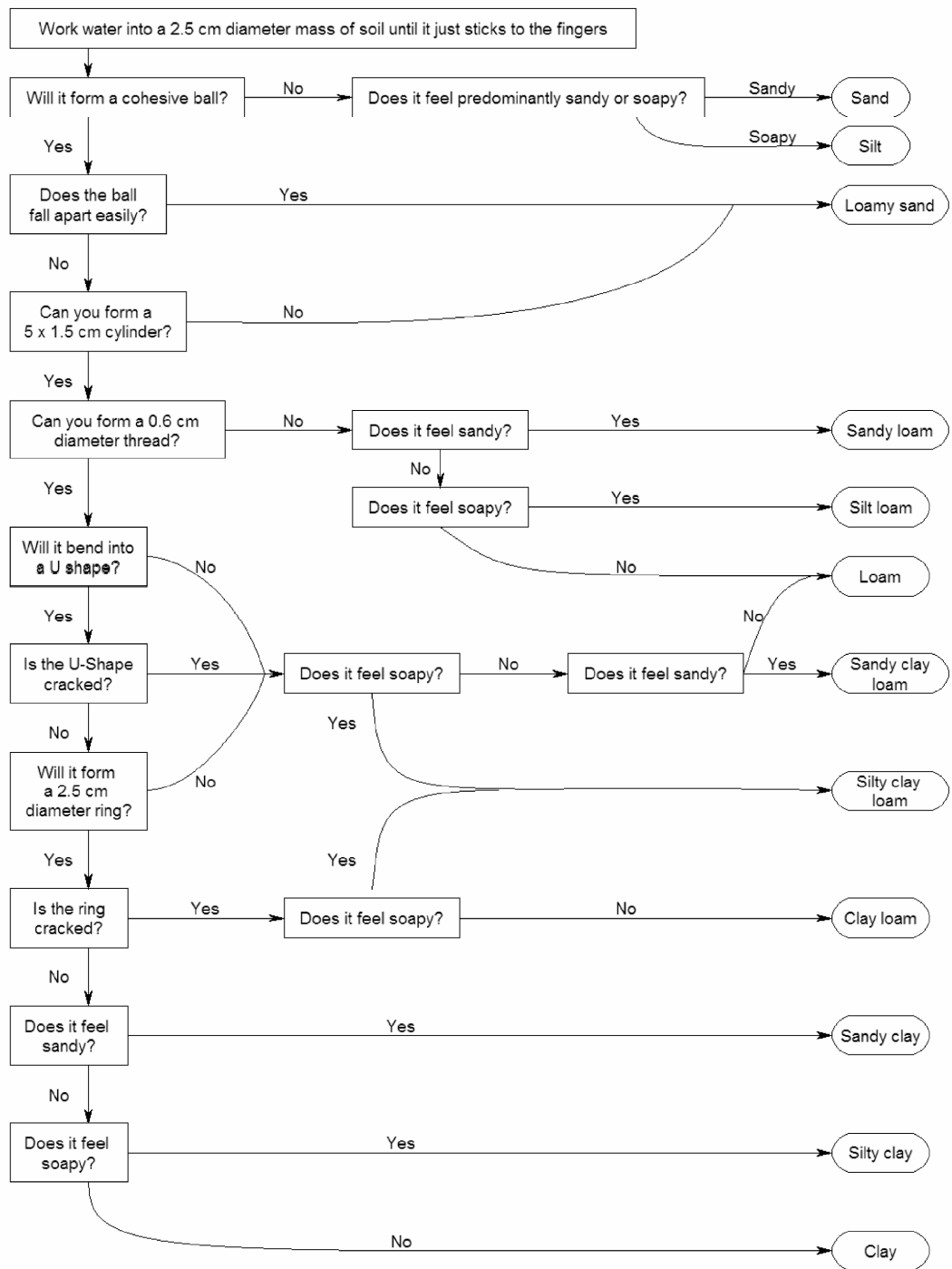


### Boundary distinctness

Boundary distinctness is a measure of how sharp the transition between one context and the next is. Distinctness is determined by estimating the thickness of this transitional zone through which one horizon grades into another.

Boundary class	Criteria
Sharp	0 – 0.5 cm
Abrupt	0.5 – 2 cm
Clear	2 – 5 cm
Gradual	5 – 15 cm
Diffuse	Greater than 15 cm

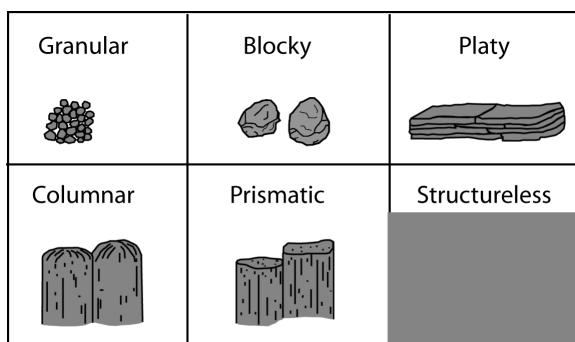
# Soil Texture flowchart



## Soil Structure

Structure refers to the shape and nature of the aggregates formed when soil particles clump together.

- Granular structures are small (usually no more than a centimeter across) crumbs of soil. If a soil contains a lot of coarse inclusions it may appear granular as the soil particles coat the coarse inclusions.
- Blocky structures tend to be about 1 and 5 cm across and its sides are roughly equal in size. They are often pictured as being cubes of soil but in practice tend to be more irregularly shaped.
- Platy structures are thin (usually less than a centimeter thick) plate like aggregates that have their longest axis in a horizontal direction.
- Columnar and prismatic peds can be 10 or more centimeters across and may be considerably longer vertically.
- Structureless soils show no observable aggregation.



### Soil composition

Organic	More than 30% organic matter
Organo-mineral	2 – 30% organic matter
Mineral	Less than 2% organic matter

### Organic Matter types

- **Fresh/unaltered non woody** clearly identifiable structures larger than 2 cm.
- **Woody** lignified structures larger than 2 cm.
- **Humified** Degraded no identifiable structure. Organic component mixed with the fine mineral fraction.

In peaty soils or sediments where there is no appreciable mineral content, following terms can also be used to describe the organic matter.

- **Fibrous peat** Contains large amounts of well preserved readily identifiable plant remains less than 2 cm.
- **Semi-fibrous peat** Partly decomposed peat in which plant structures are visible, but break down when rubbed between the fingers.
- **Amorphous peat** Contains virtually no identifiable plant structures.

### Drainage

Poorly drained	Soil remains wet to a shallow depth, and excess free water is evident in the profile for long periods of time
Moderately drained	Water drains somewhat slowly due to impervious nature of substrate, low slope, and/or shallow water table
Well drained	Water drains easily but not rapidly. Free water is uncommon
Excessively drained	Water is removed from the surface very rapidly. Free water is very rare or very deep

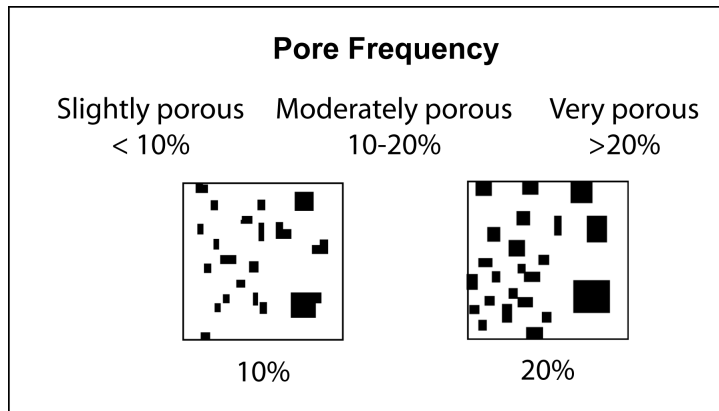
Other indicators of drainage status can be the local vegetation a poorly drained soil may support sedges and rushes for example. Also look for iron mottling and blue/grey soil colours which can indicate poor drainage and periodic waterlogging.

## Sedimentary features

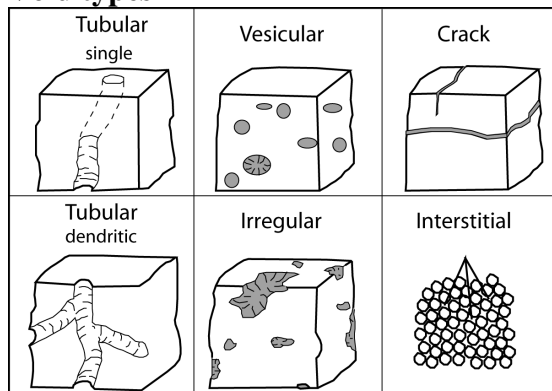
Sedimentary features include the finer scale bedding that result from individual depositional events. Obviously the identification and classification of such features depends on the criteria used to define separate 'contexts'. The distinction between context and bed or laminae is left to the archaeologist, hence sedimentary structure can refer to the internal properties of a single context/bed, or to the presence of multiple beds and/or laminae within a context. Sedimentary features include: horizontal bedding, cross bedding, graded bedding, laminations (less than 1 cm thick), flute marks, ripple marks etc.

## Porosity

Porosity is determined by estimating the surface area occupied by water or air-filled voids.



## Void types



**Tubular (single)** - cylindrical, elongated pores e.g. worm channels.

**Tubular (dendritic)** - cylindrical branching voids -empty root channels

**Vesicular/vesicles** - ovoid to spherical voids e.g. trapped gas bubbles.

**Irregular** - non-connected cavities and chambers of any shape in the soil.

**Interstitial** - voids between sand grains and rock fragments.

**Crack** - fissures.

## Infillings

These are inclusions of material that fill voids, cracks or animal burrows.