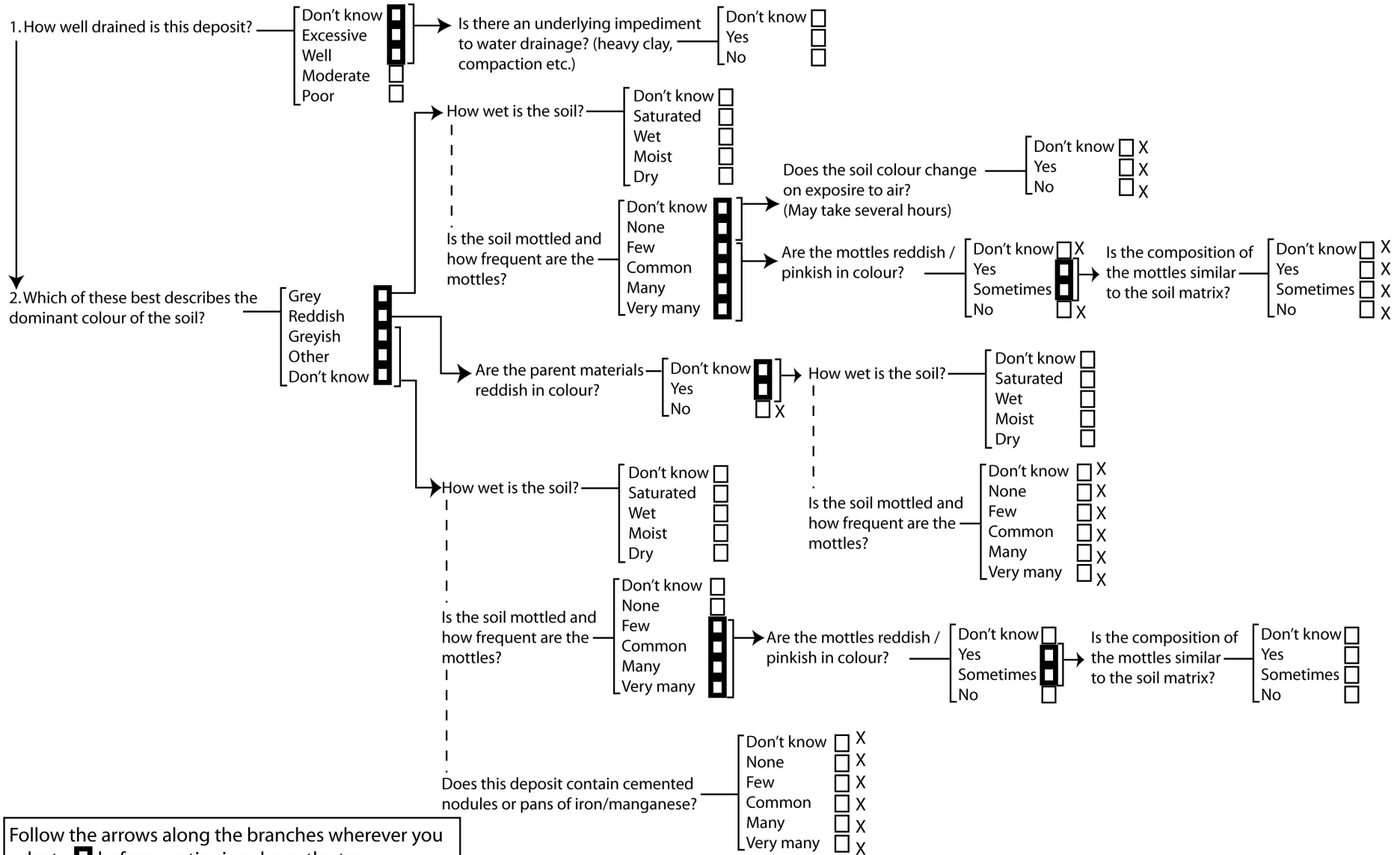


# Has this deposit been affected by waterlogging and iron movement?



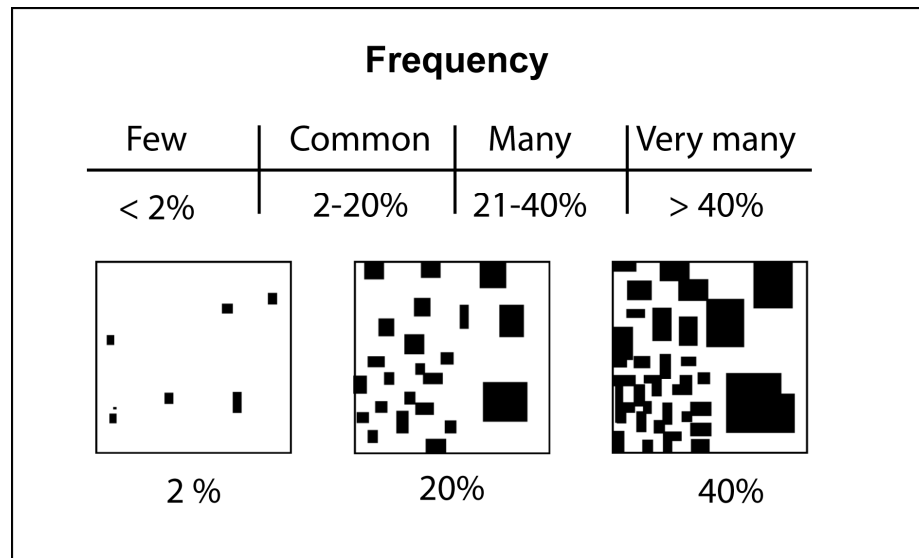
Follow the arrows along the branches wherever you select a  before continuing down the tree. Stop when you reach a X.

### Drainage Class

Drainage class	Criteria
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 colours which can indicate poor drainage and periodic waterlogging. Even freely drained deposits can become waterlogged if there is an impediment to water movement such as underlying clay-rich deposits or compacted layers with low porosity.

### Mottle and Nodule Frequency



to air, becoming pinker, redder, or browner. Certain minerals such as vivianite may also change colour (becoming blue). In some soils this change may be very slow so look at exposures that have been open for a while as opposed to freshly cleaned faces.

### Soil Wetness (Field moisture)

Dry	Soil feels completely dry and when wetted will show a distinct colour change (unless entirely quartz sand).
Moist	Soil feels damp though no water is visible on grain or aggregate surfaces.
Wet	A film of water is visible on grains and aggregate surfaces but there is no free water.
Saturated	The sample contains easily visible free water, working or squeezing the soil liberates the water.

### Mottle Composition

This refers to the composition of the mottle as a whole, rather than the core where there may be a fragment of organic matter etc. With the exception of colour and iron and manganese concentrations does the composition of the mottle differ from that of the surrounding soil matrix. Pay particular attention to texture and mineralogy / stone type.

### Mottle Colour

Look for reddish or pinkish hues in comparison to the colour of the main soil matrix.

### Parent Material Colour

Look for reddish colour in local soils. For alluvial deposits the parent material may be at distance anywhere within the river catchment.

### Soil Colour Change

Reduced (gleyed) soils may change colour on exposure to air, becoming pinker, redder, or browner. Certain minerals such as vivianite may also change colour (becoming blue). In some soils this change may be very slow so look at exposures that have been open for a while as opposed to freshly cleaned faces.