

Determining SHWT

A draft treatment of rules ported for
Landjudging

Iron-Rich Soils

Look for redox depletions

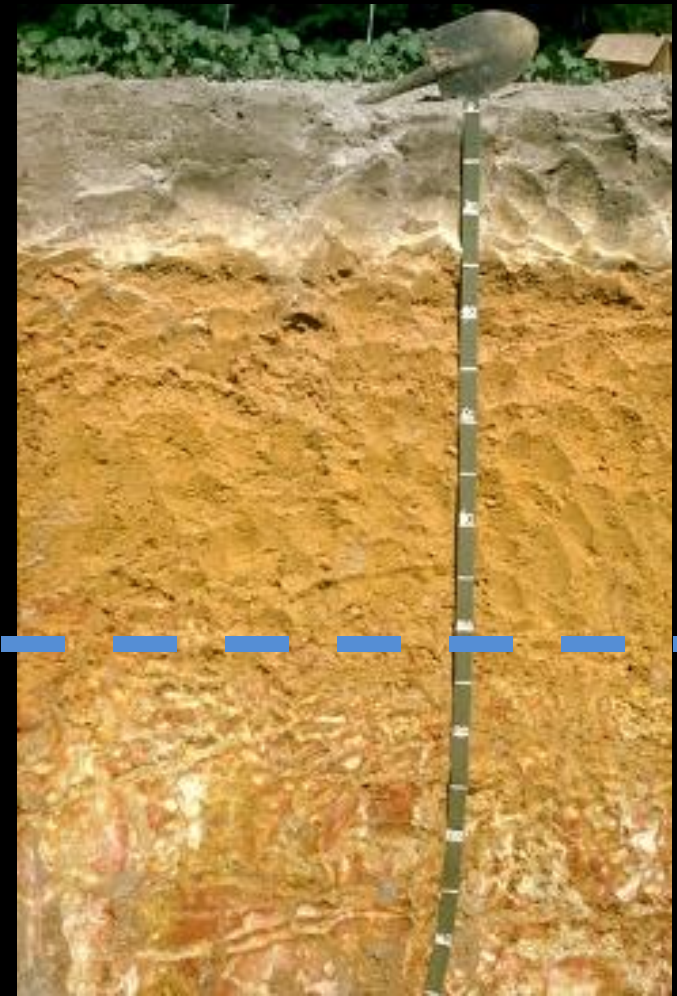
Depletions are “dull grey”

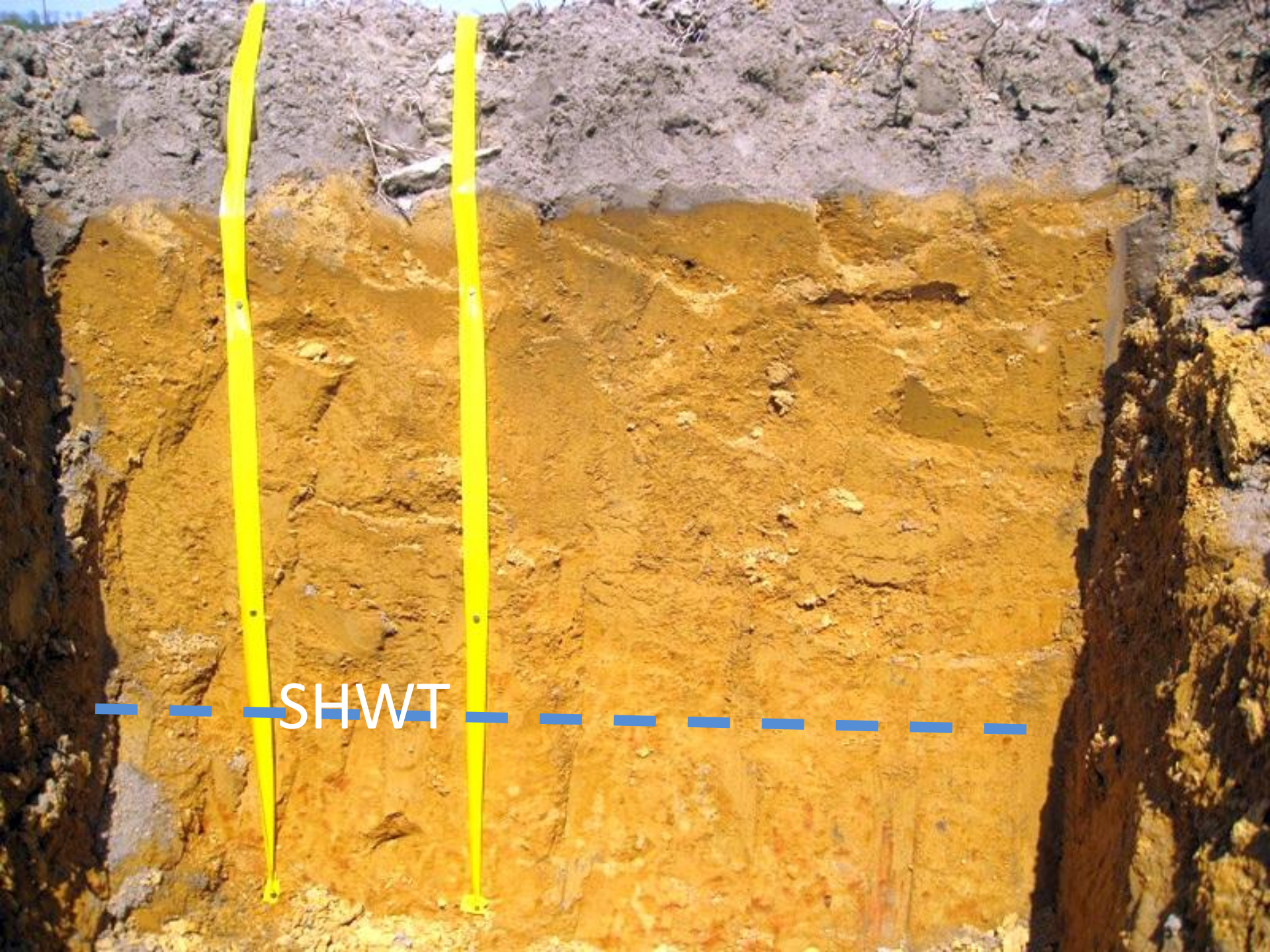
Sometimes, most of
Horizon is depleted

Concentrations typically accompany
depletions, but are ignored. Just
look for depletions.

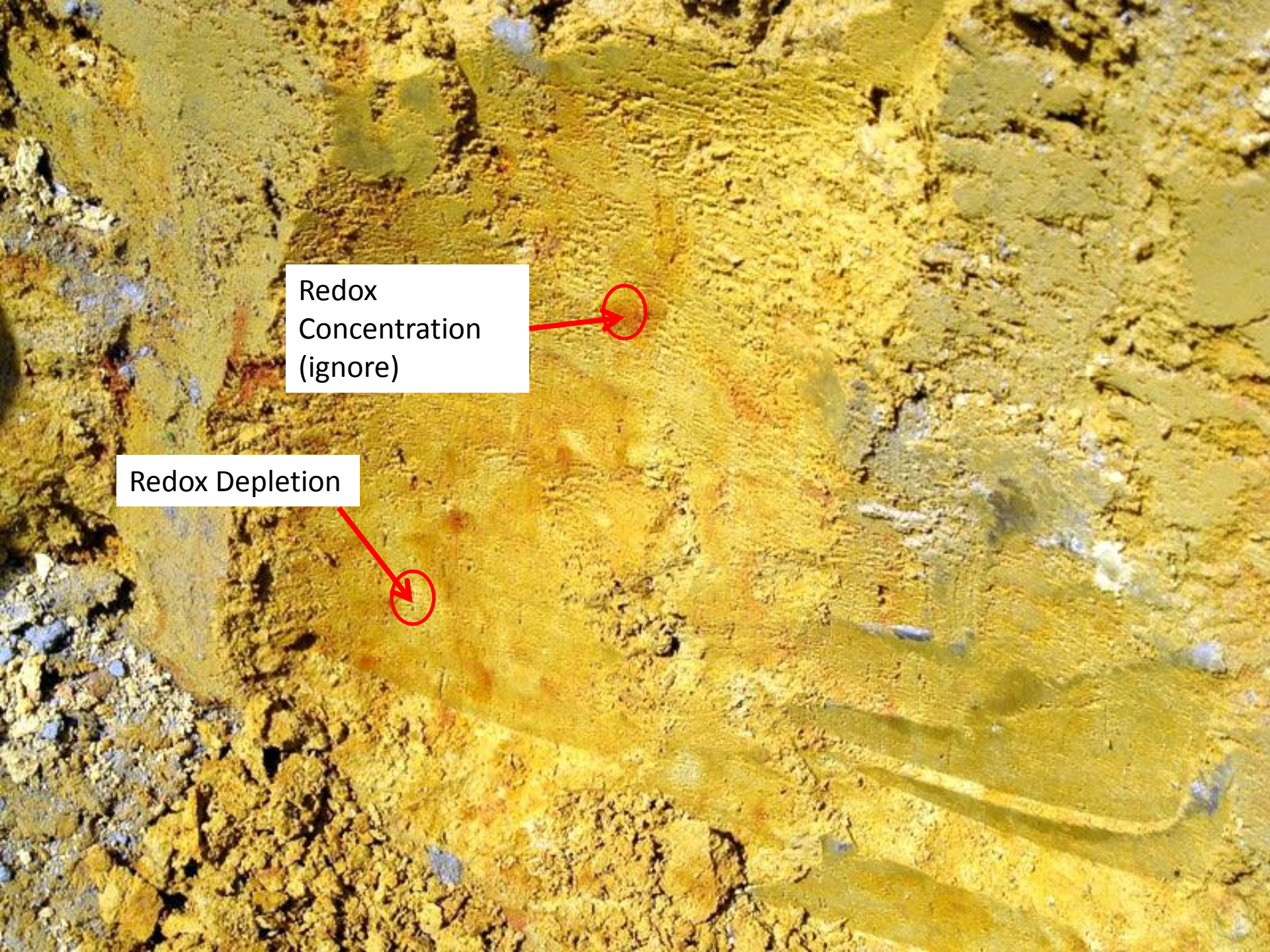
This is the consequence of ample
iron.

SHWT





SHWT



Redox
Concentration
(ignore)

Redox Depletion



SHWT

Iron-Poor Soils

Look for redox concentrations

or

Stripping (maybe)

SHWT



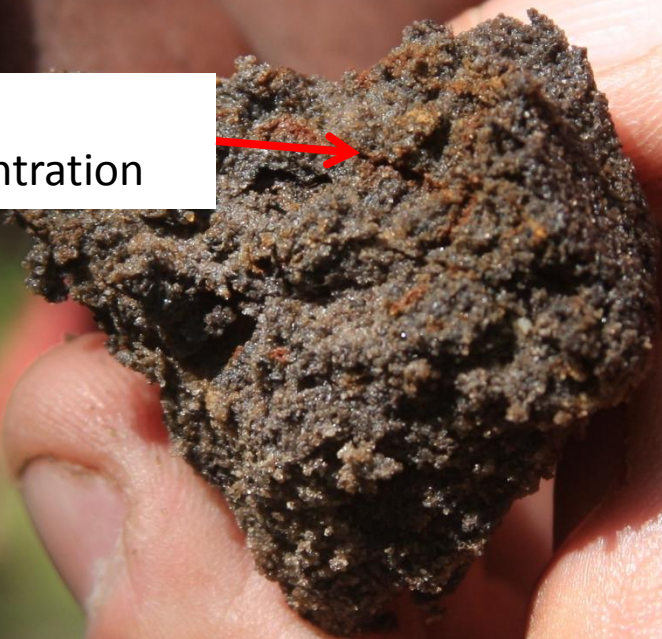
Stripped area: faint, diffuse, splotchy removals of organic matter




Stripped area: faint, diffuse, splotchy removals of organic matter



Redox
Concentration

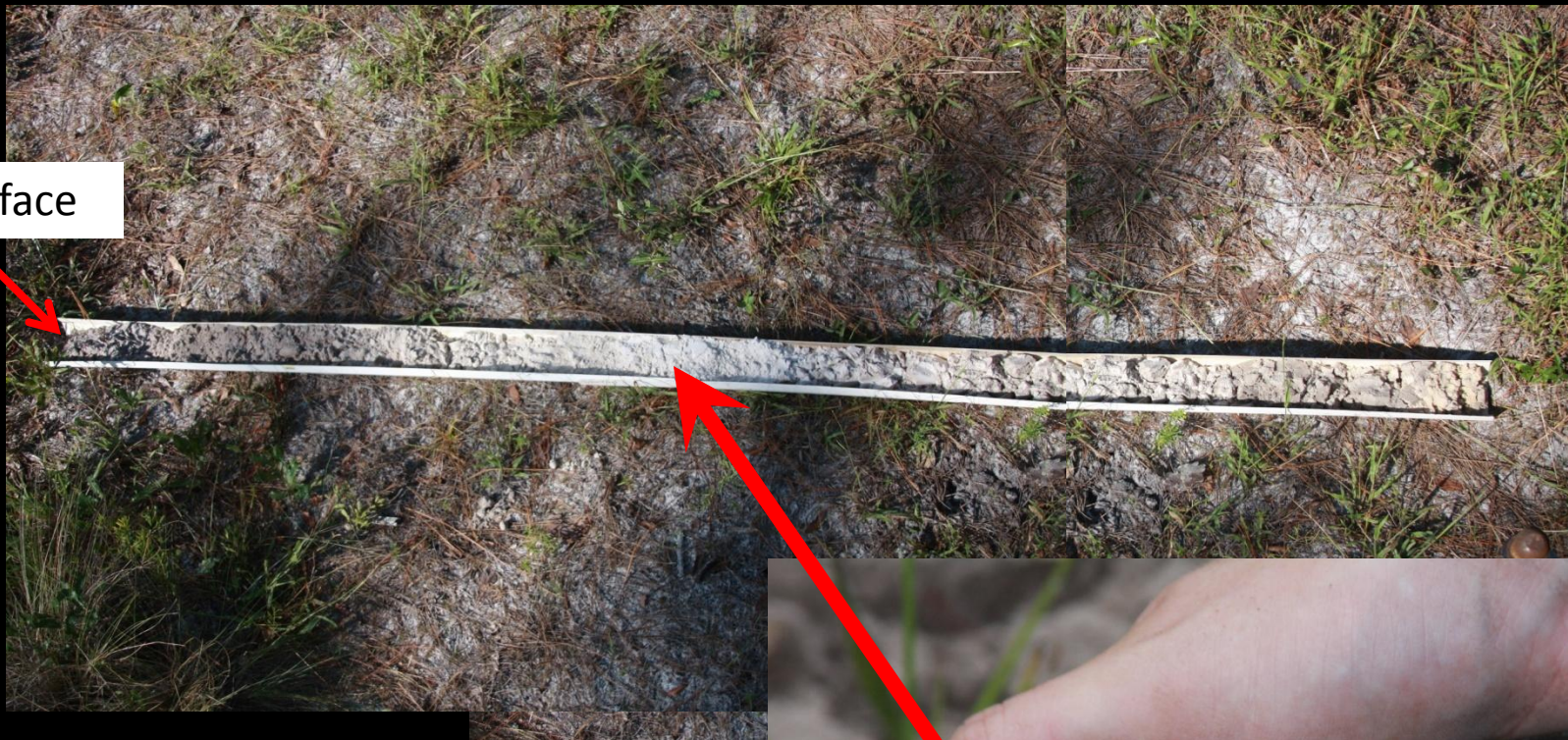


A close-up photograph of a person's hand holding a dark, curved metal plate. The plate is covered with a layer of light-colored, sandy soil. On the right side of the plate, there is a distinct, darker, and more textured area of soil. A red arrow points from a text box on the left to a small yellowish-brown spot on the sandy soil. The background is out of focus, showing green grass and brown soil.

Most of the horizon is stripped, but you can still see faint-diffuse-splotchy

Redox
Concentration

Soil surface



SHWT



Rules

- If loamy or clayey, SHWT at upper limit of 2% redox depletions
- If sandy, SHWY at upper limit of 2% redox concentrations or 10% stripping
- If spodic horizon present, SHWT probably $\frac{1}{2}$ way between top of spodic and soil surface. Look for stripping as evidence and significant root die-off.
- If redox conc. below the spodic and stripping above, SHWT at stripping.
- If redox below and no stripping above, then SHWT below spodic at the top of the redox conc. These can be tough.
- Students tend to chase stripping all over the place. Best to ignore it.
- I am undecided how technical to get with this.