



A Hydric Soil Tool for Wetland Delineation

Hydric soil - definition

Soils that have formed under conditions of saturation, flooding or ponding that has caused anaerobic (low oxygen) conditions in at least the upper 30 cm of the soil (based on Federal Register, 1994)

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Peter Singleton
Bev Clarkson

Overview

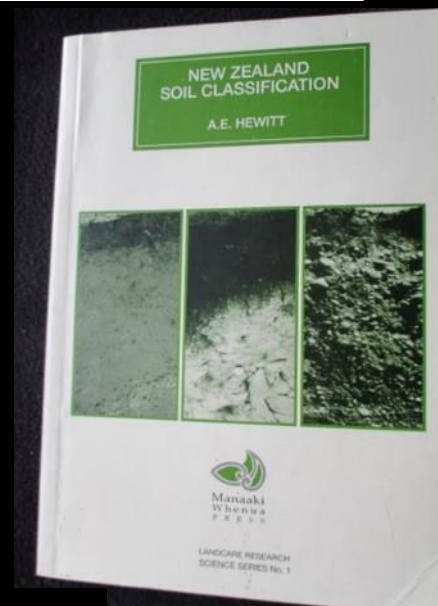
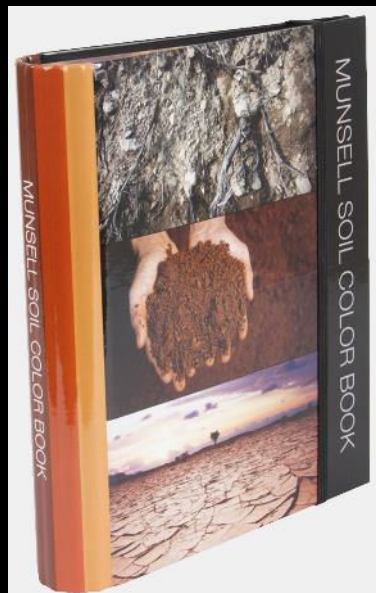
- Most NZ soils are easy – 80:20 rule
- Look at existing soil information
- Understand soil-landscape relationships and processes
- Colour is fundamental
- Some soils may require a pedologist



Soil Information

<https://iris.scinfo.org.nz/>

<https://smap.landcareresearch.co.nz/>



Understanding soil-landscape relationships



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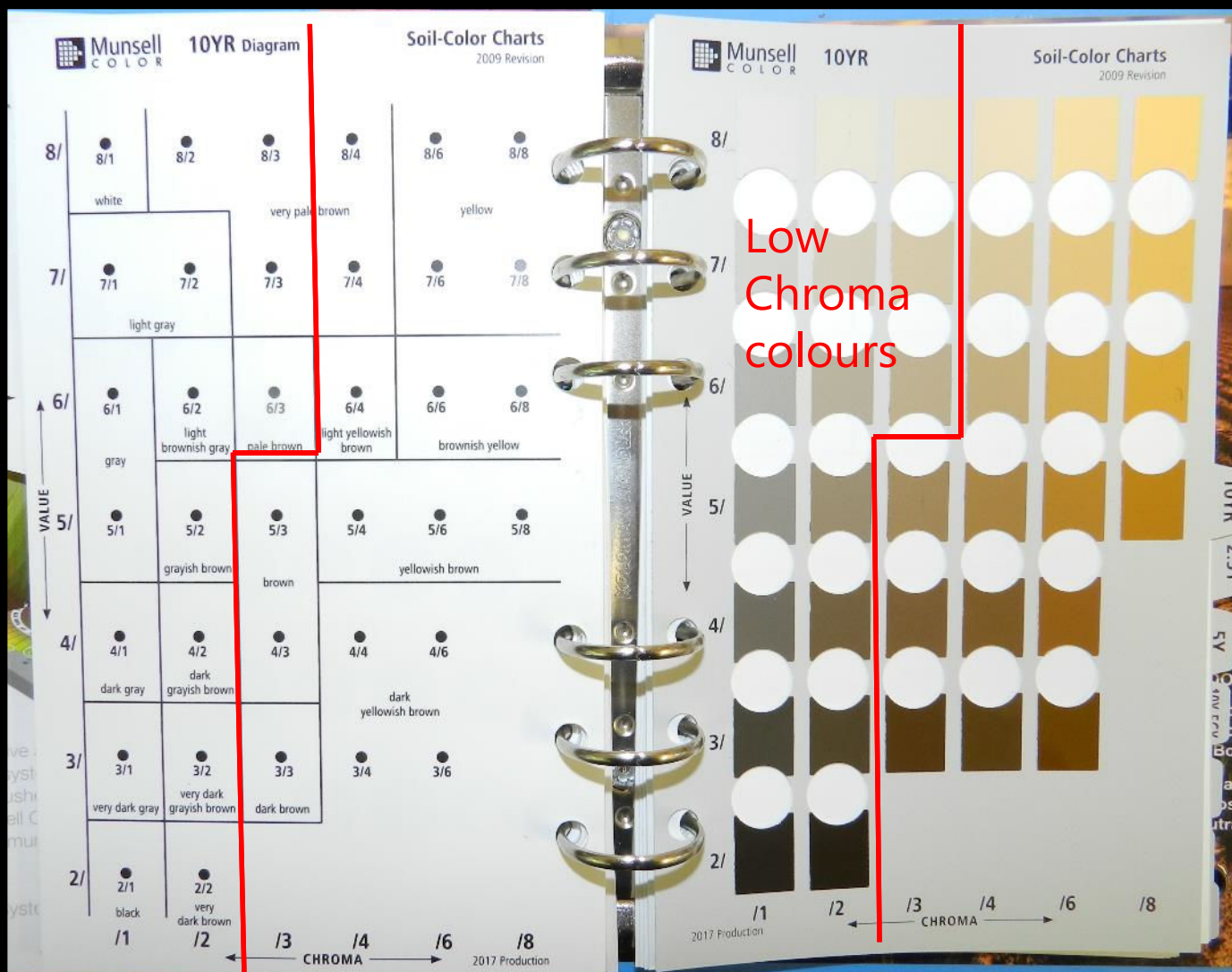


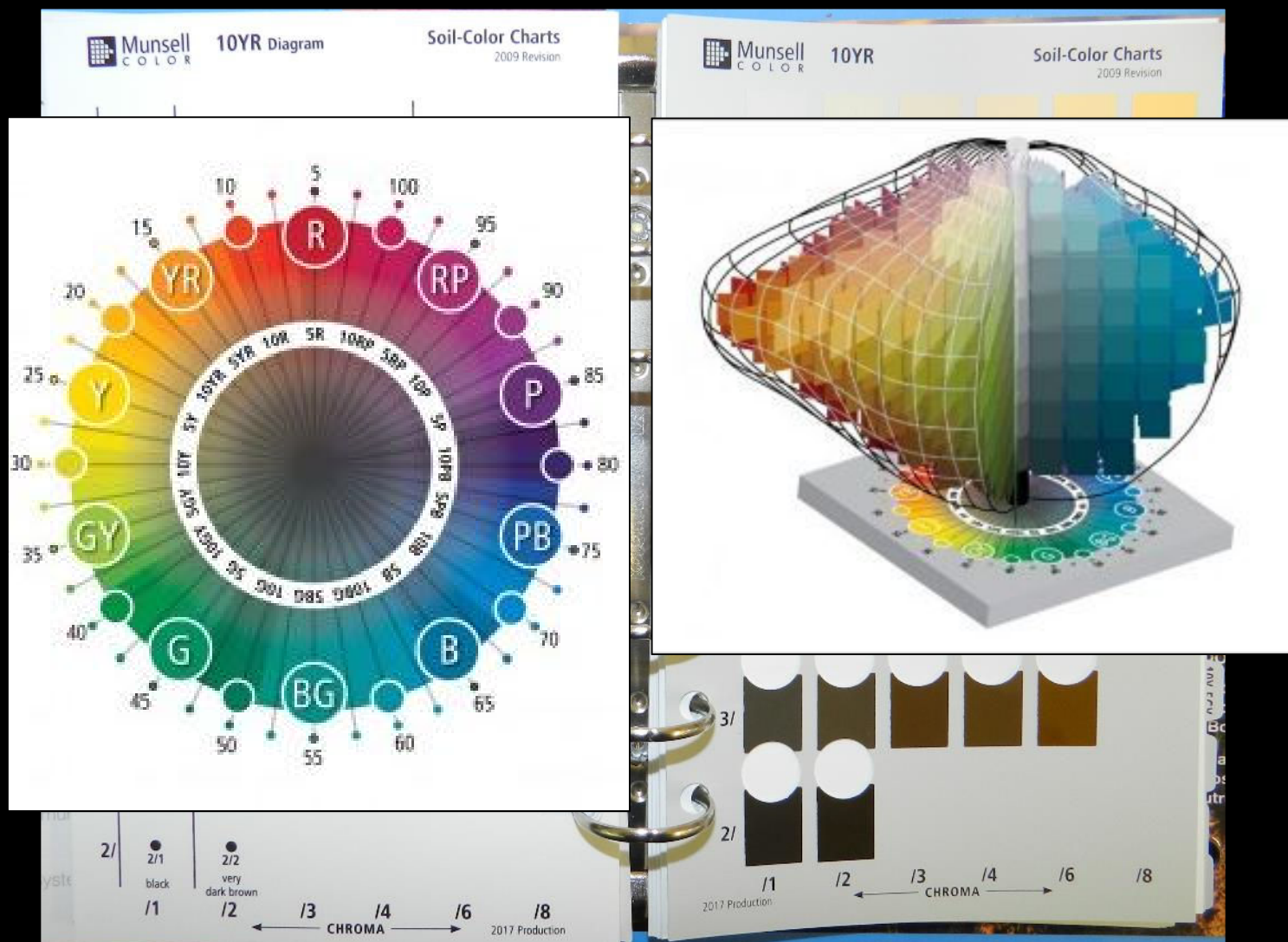
Understanding soil-landscape relationships



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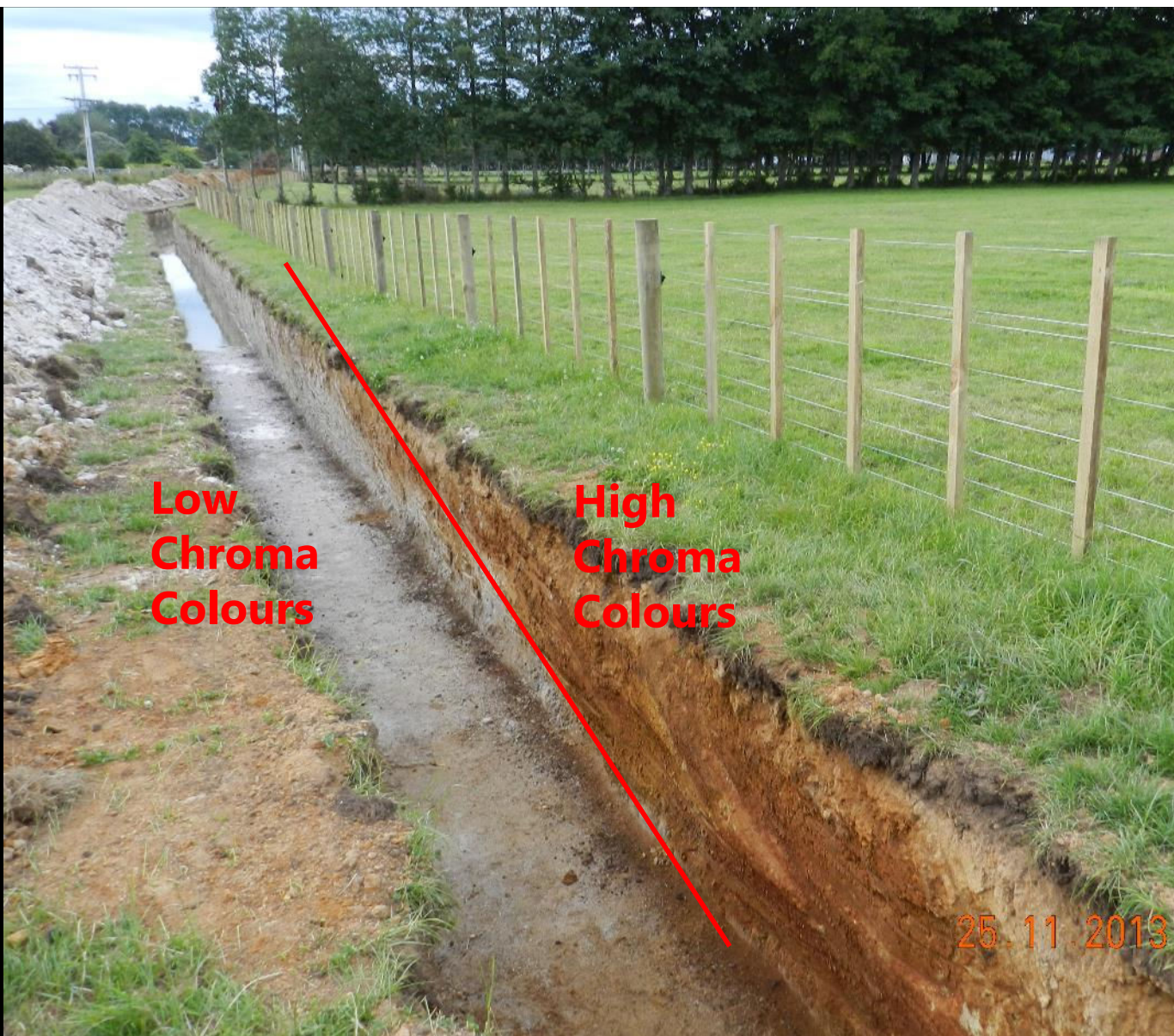


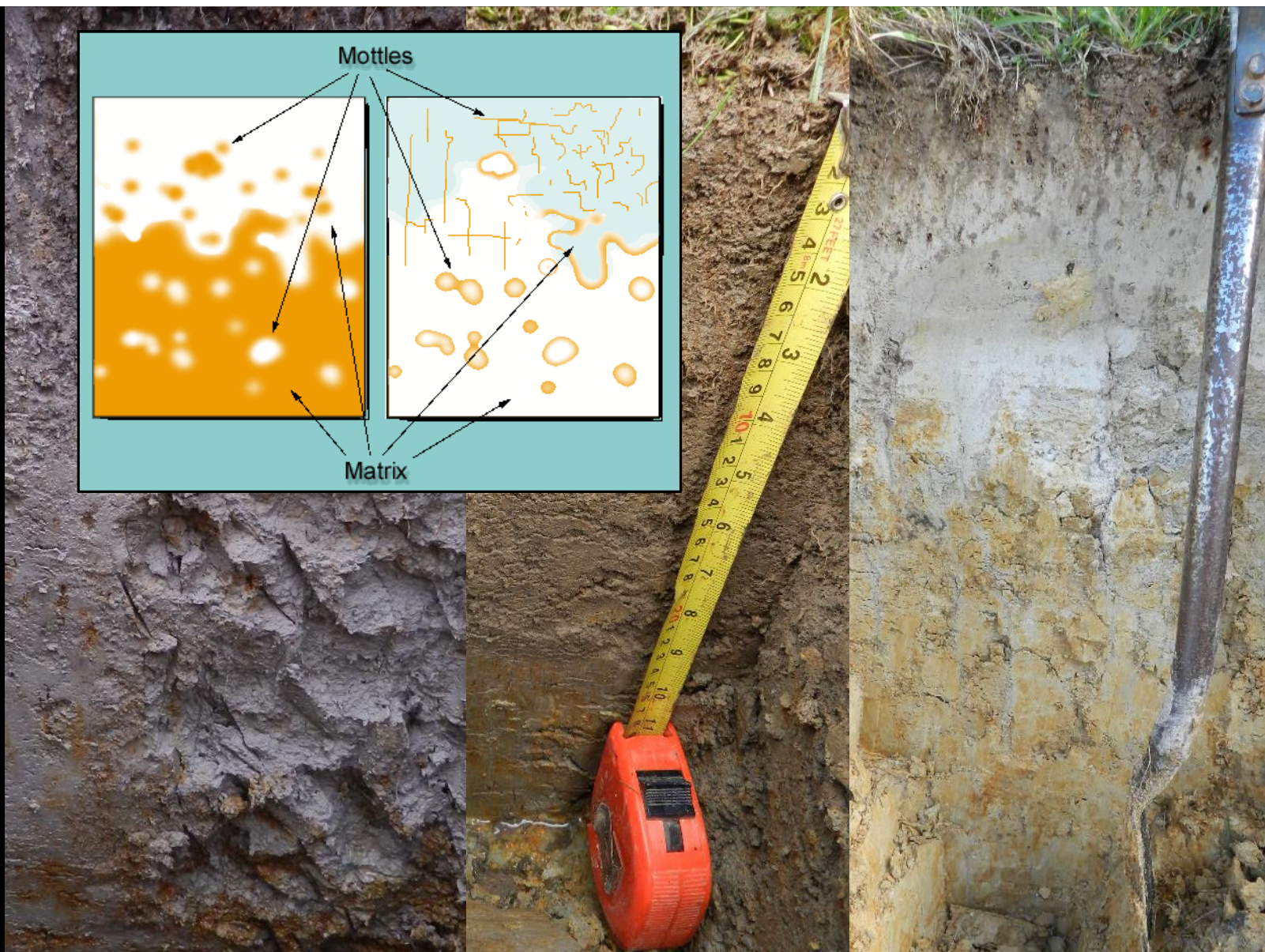


**Low
Chroma
Colours**

**High
Chroma
Colours**

25.11.2013







27.10.2017 14:02

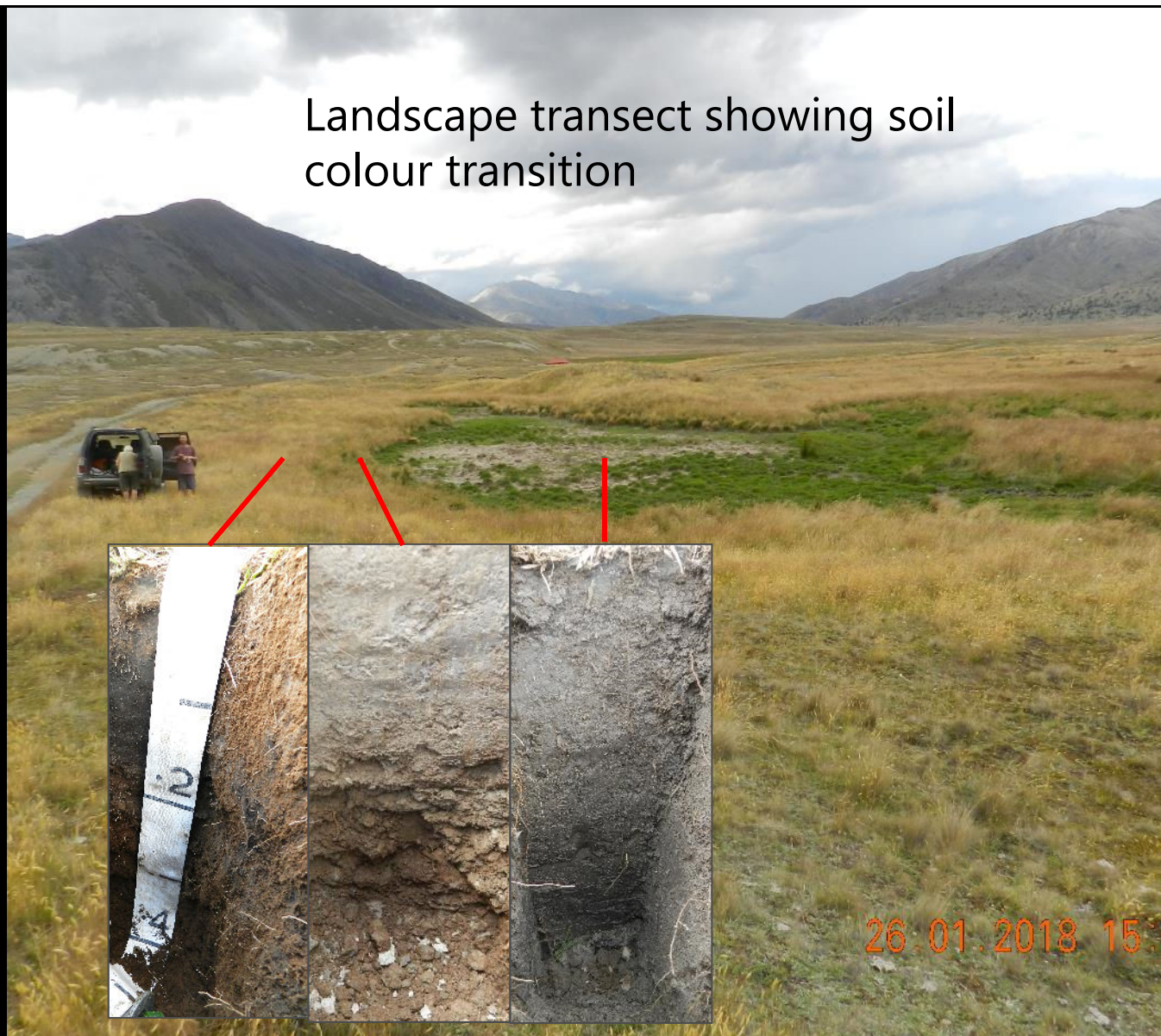


Peat/Organic Soils

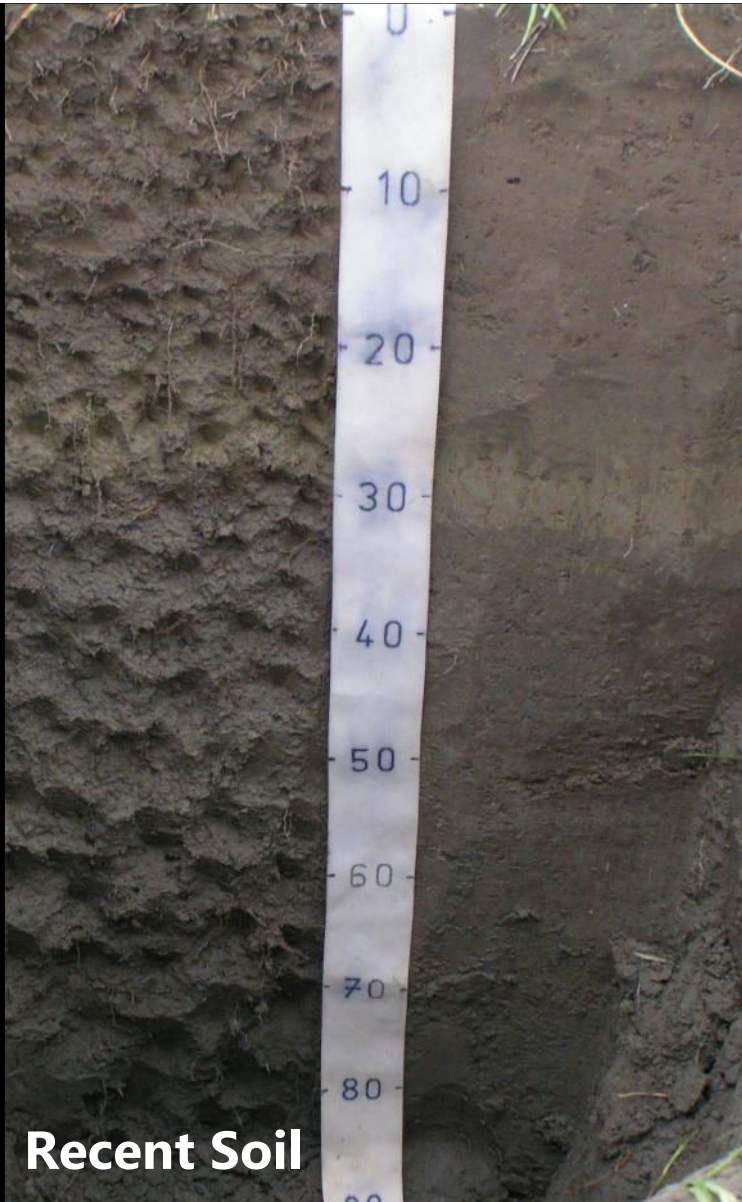




Landscape transect showing soil colour transition

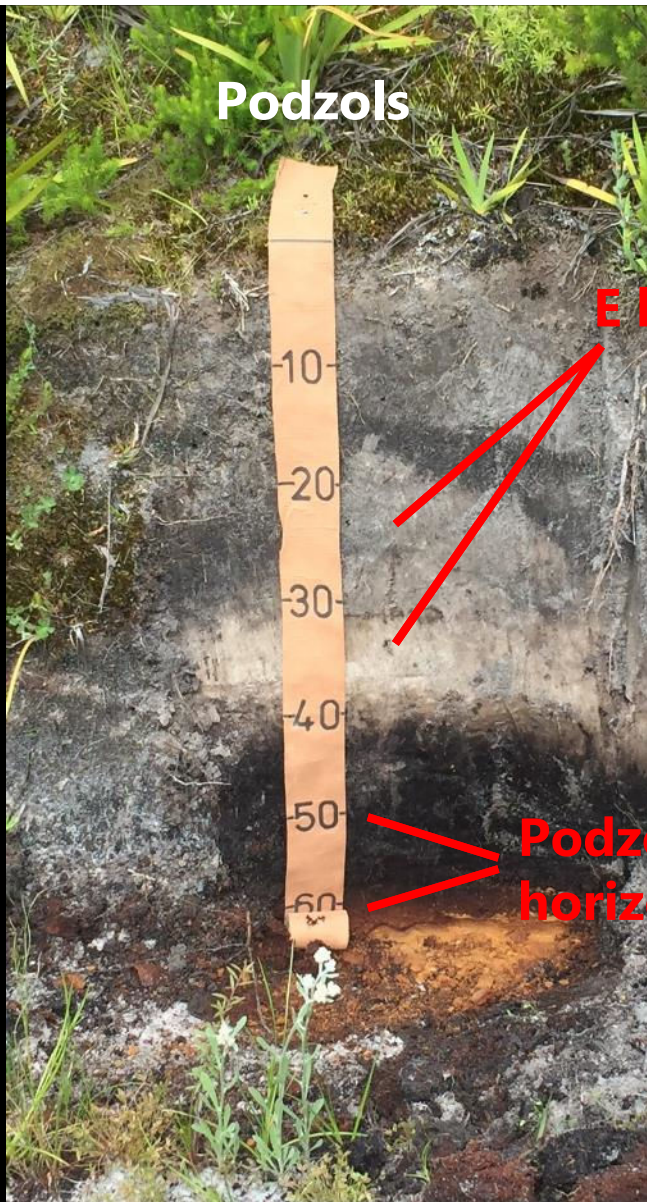


Recent Soil



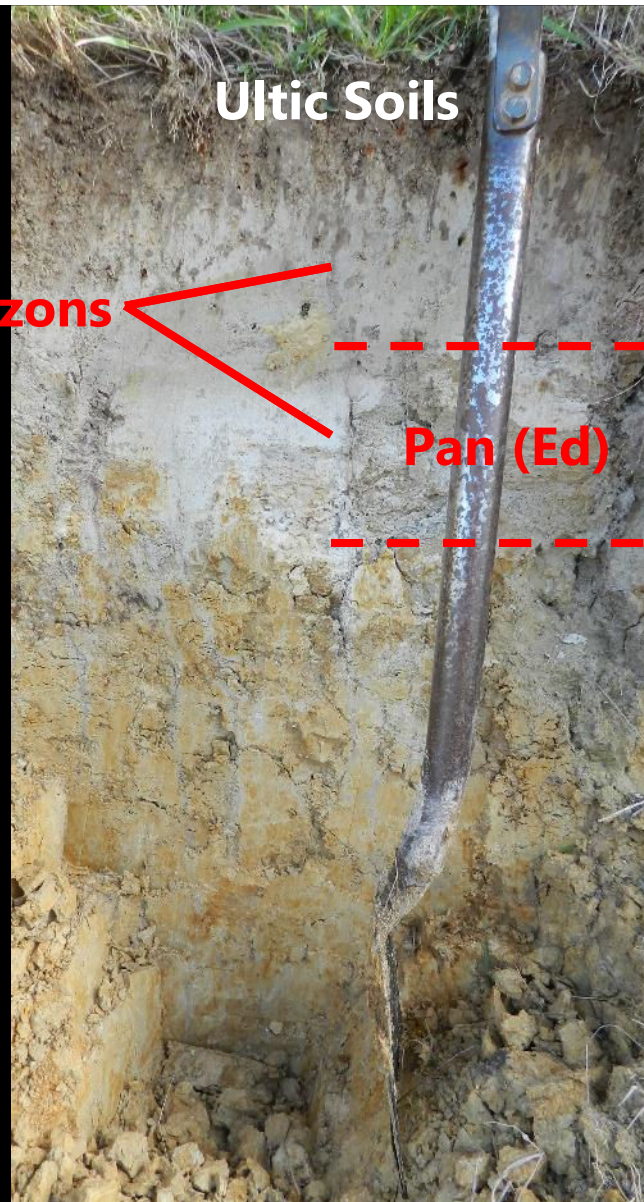
Recent Landscapes





E horizons

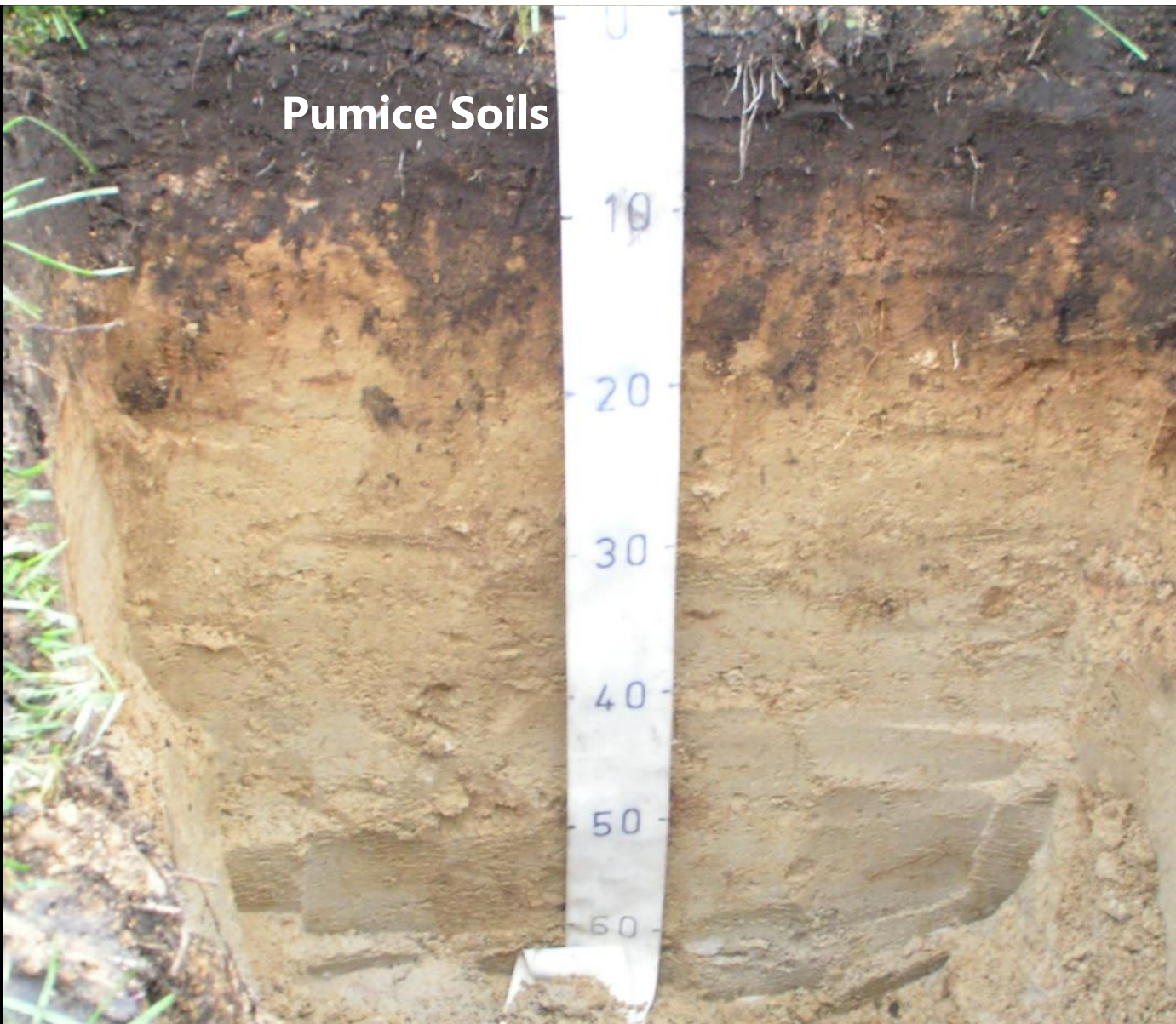
Podzolic horizons



Pan (Ed)



Pumice Soils



Pumice Soils



17.07.2017 13:3

Pumice Soils →



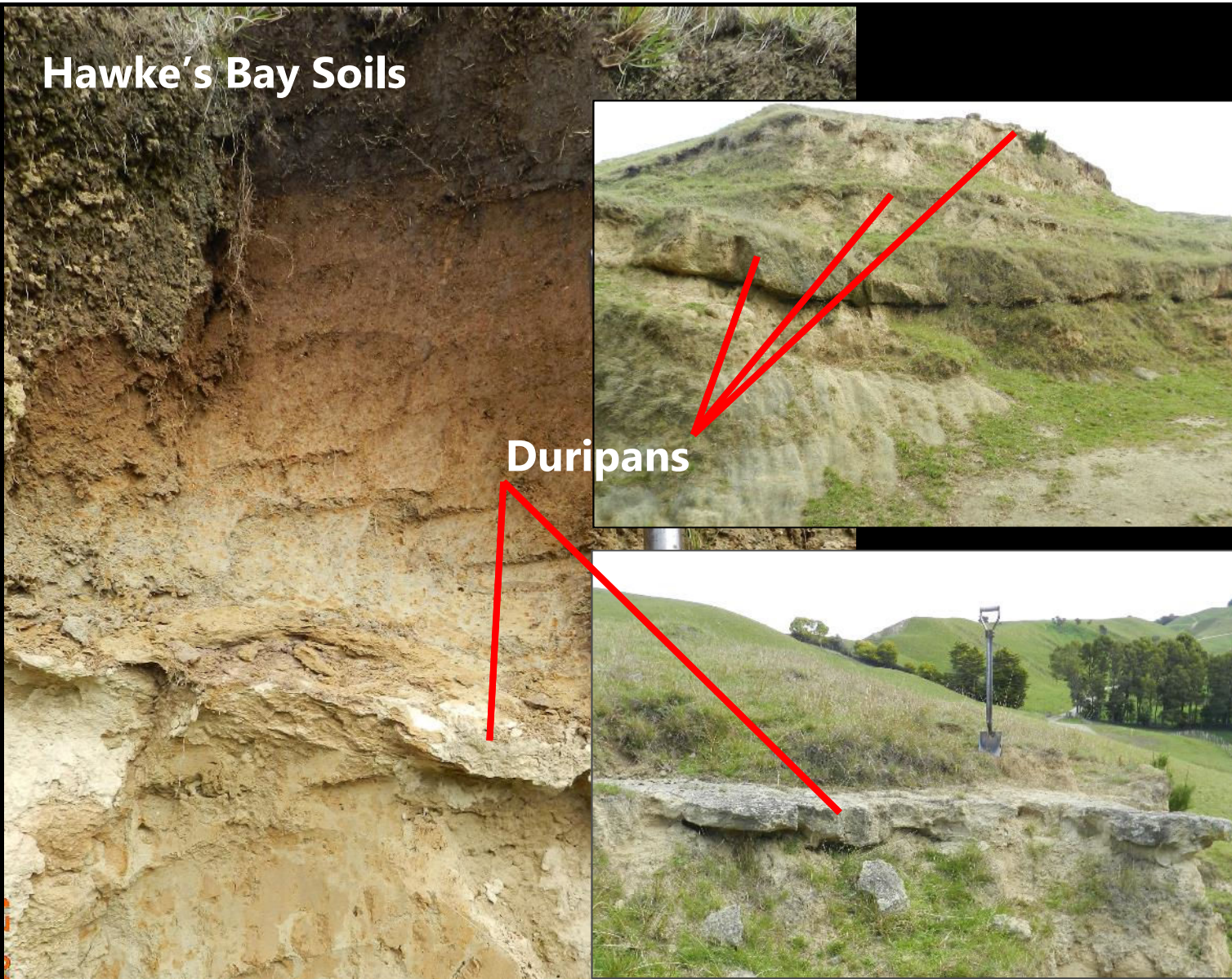
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Hawke's Bay Soils



Duripans



Summary

- Look at existing soil information
- Think about soil-landscape relationships and processes
- Colour is the most important soil feature
- Some soils are difficult due to pale parent materials or leaching processes

