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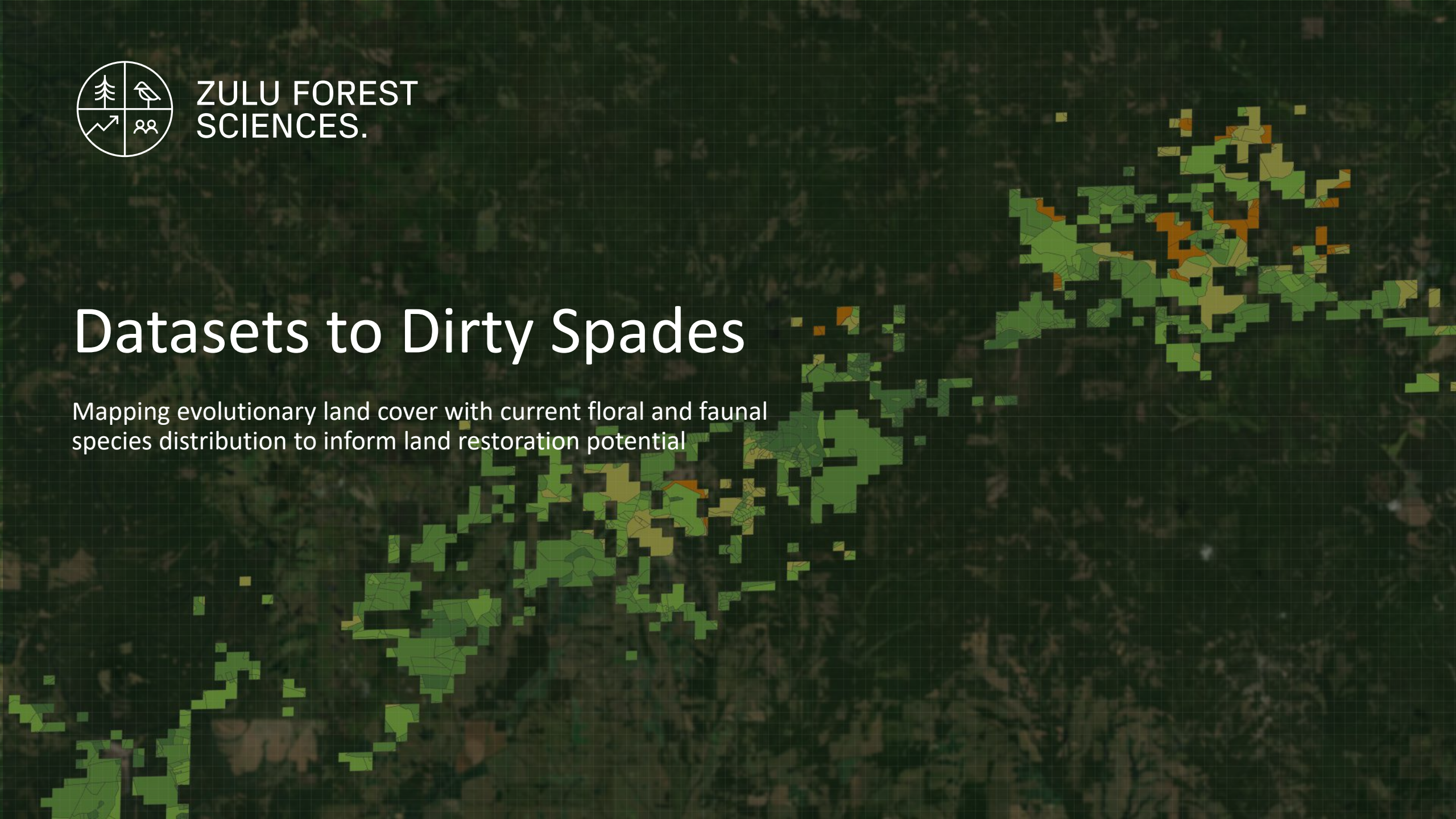
Datasets to Dirty Spades

Mapping evolutionary land cover with current floral and faunal species distribution to inform land restoration potential



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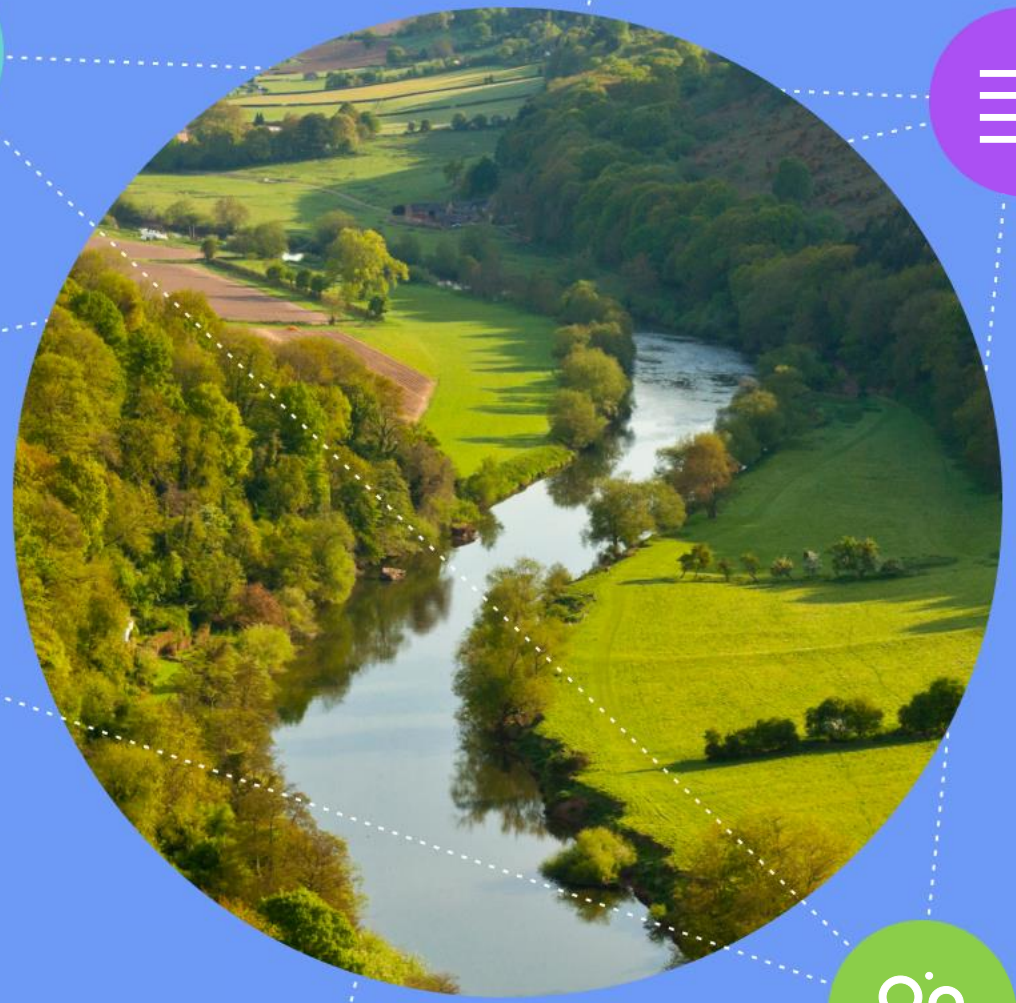


Woodland

Peatland

Biodiversity

Soil

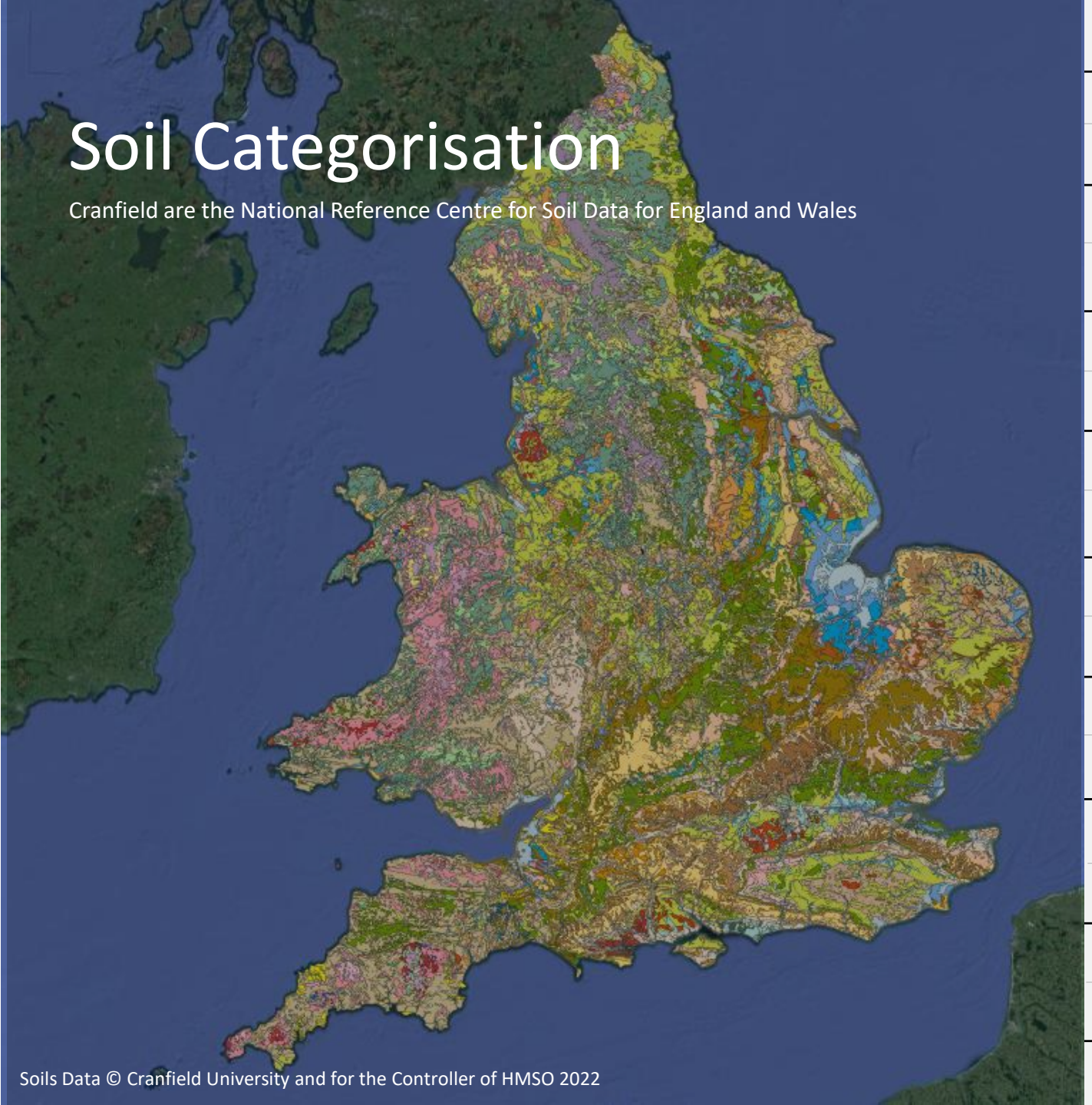
Water

Our mission

Regenerating natural carbon sinks and habitats

Soil Categorisation

Cranfield are the National Reference Centre for Soil Data for England and Wales



- Artificial
- Peatland
- Becoming saltmarsh
- Forest
- Grassland
- Wetland
- Heathland
- Sand dunes
- Slope peats

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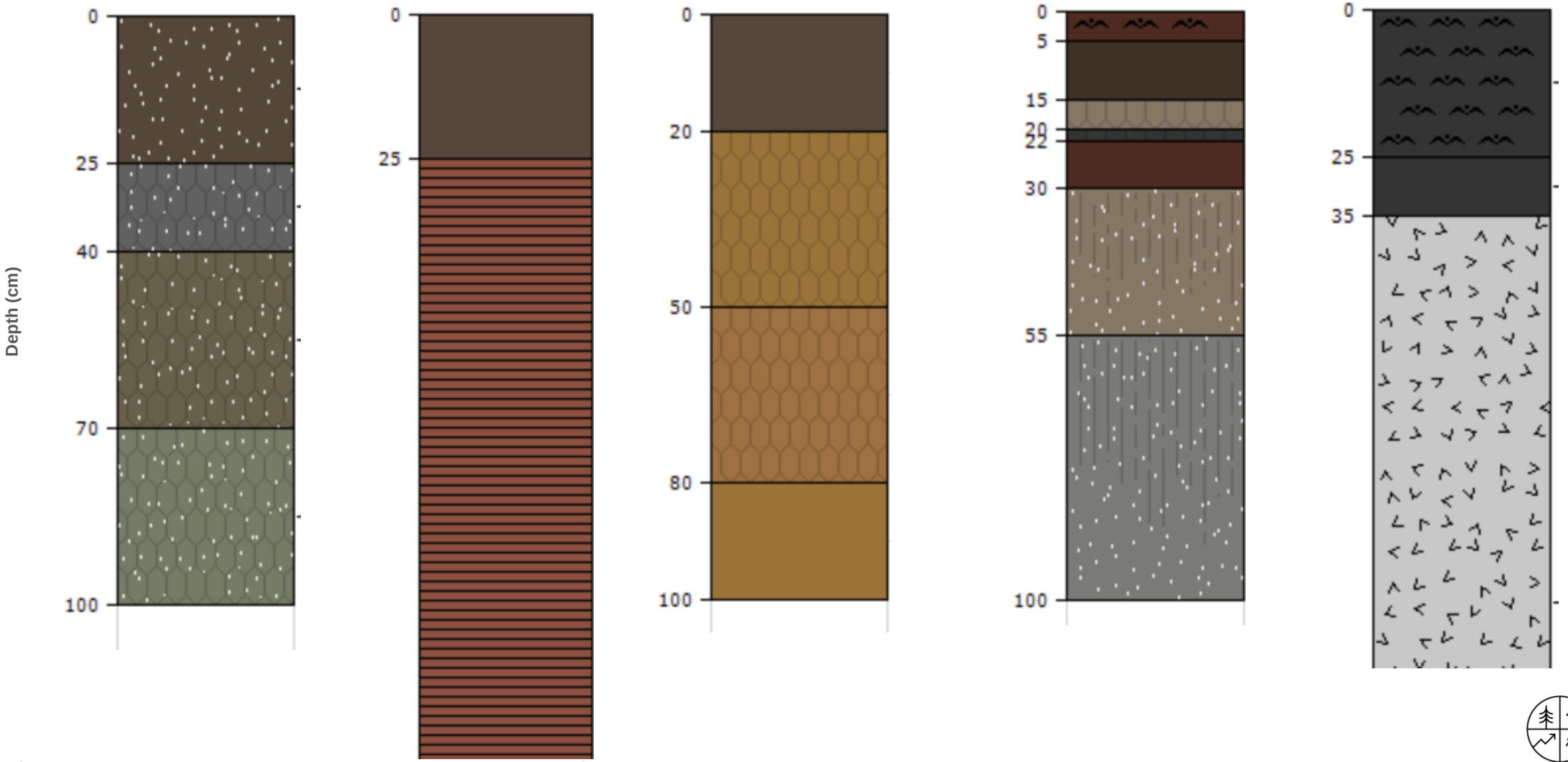
Brief Soil Profile Description



Cranfield University 2022. *The Soils Guide.* Available: www.landis.org.uk. Cranfield University, UK.

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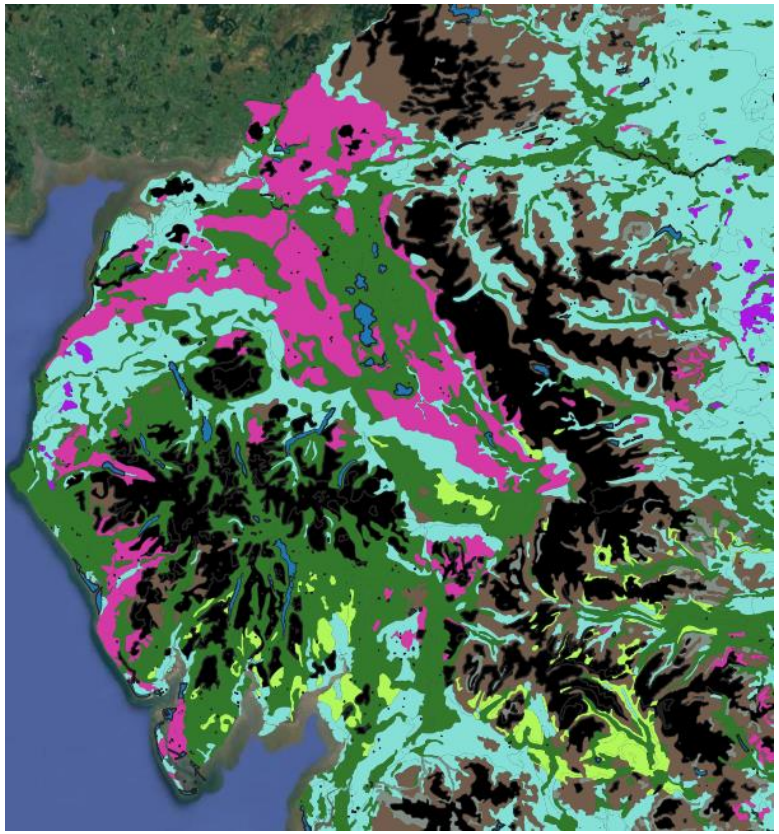
Map showing historic habitats



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High Resolution Example

Percentage presence	Soil Name	Total soil depth	Waterlogging (without drainage)	Waterlogging (with drainage)	Formation	Gleying	Mottling
35%	A	>120cm	IV	III to IV	Wetland	25-45cm	>25cm
20%	B	>100cm	IV	III	Wetland	25-35cm	>25cm
15%	C	>100cm	III	II to III	Forests	No	>25cm
10%	D	>100cm	V to VI	IV	Wetland	No	>20cm

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Integrating Faunal and Floral Biodiversity

149 species recorded since 2010

- ✓ 69 woodland species
- ✓ 42 wetland species
- ✓ 22 grassland/farmland species

Of all the species found:

- ✓ 25 IUCN Red List Species
- ✓ 18 reliant on woodlands or wetlands for survival
- ✓ 7 reliant on farmland/grassland

Evolutionary Habitat

- Forests
- Wetland

Ancient Woodland Networks

- Primary Habitat
- Associated Habitats

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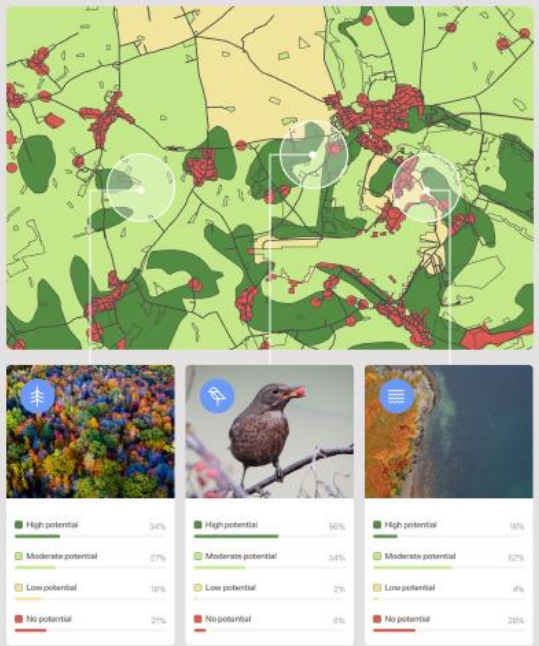
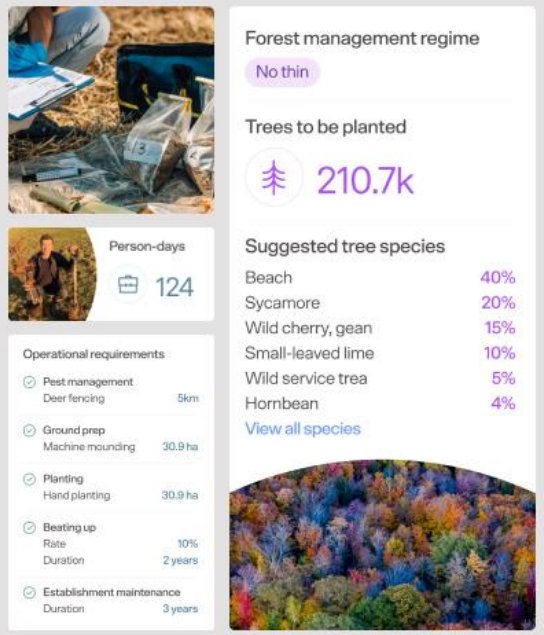
Benefits of Tech

Landscape digital twin

Land Use Optimisation



Project design and planning



Impact measurement

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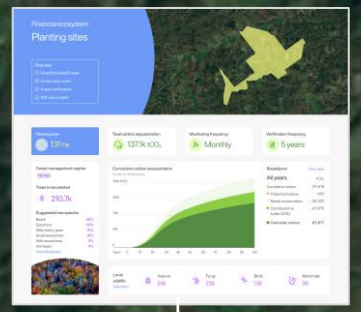
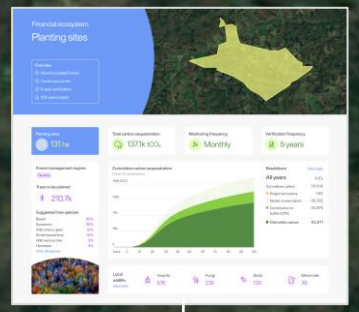
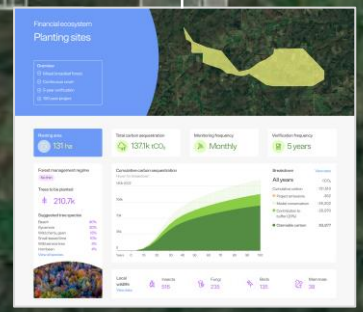
Scale & Connectivity







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