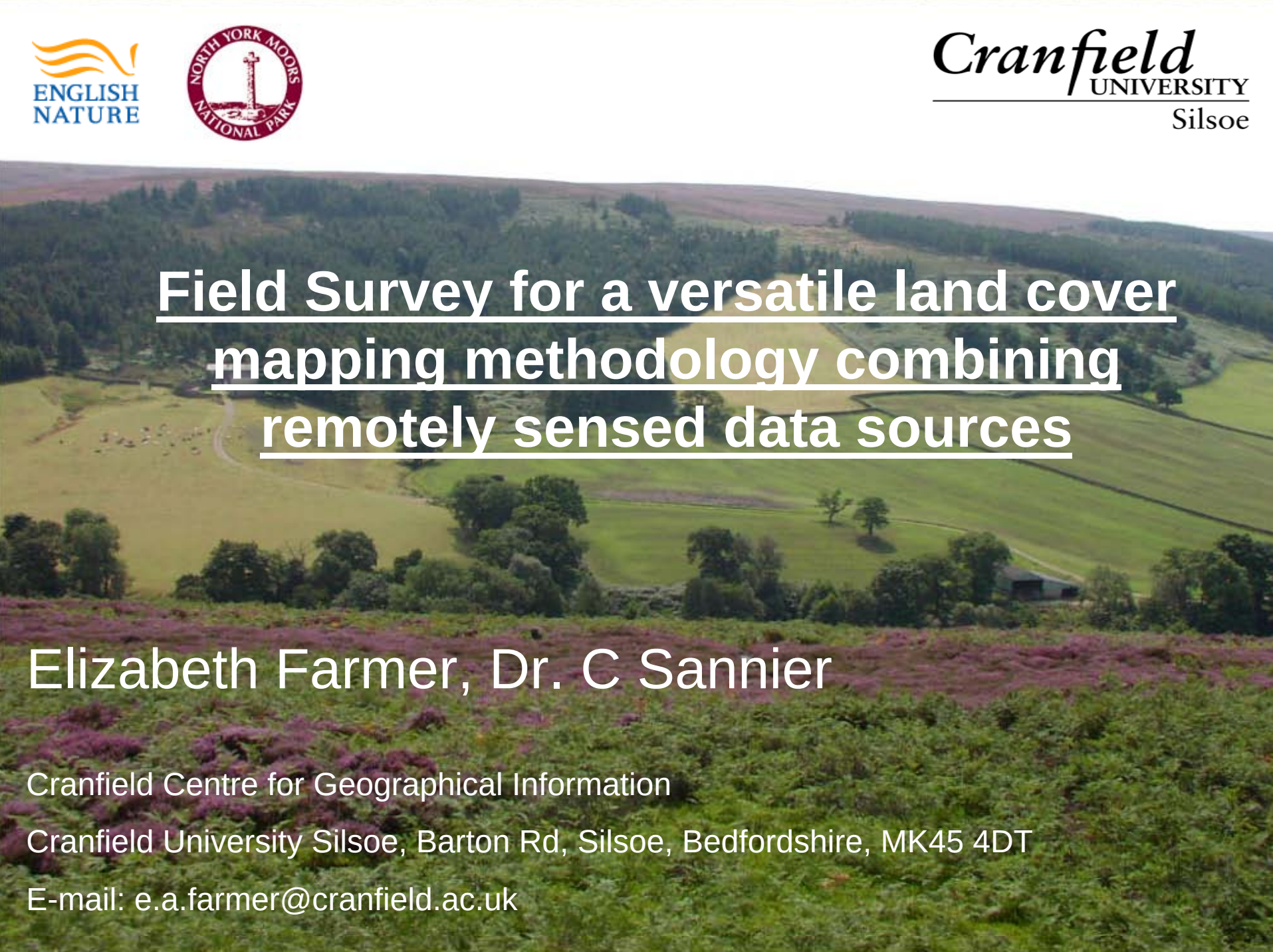

Field Survey for a versatile land cover mapping methodology combining remotely sensed data sources

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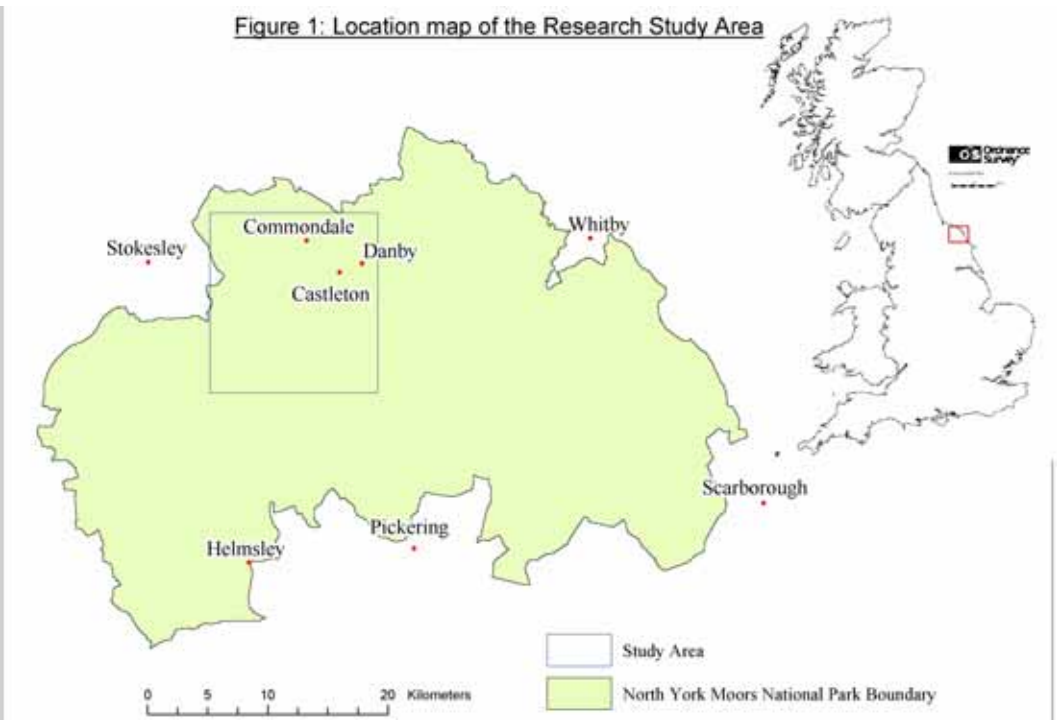
Research Outline:

To develop a land cover mapping approach which characterises the parameters typically used in boundary delineation, providing the user with a widely applicable flexible and detailed vegetation database.

Study Area:

Figure 1: Location map of the Research Study Area



Field Survey Design:

Requirement:

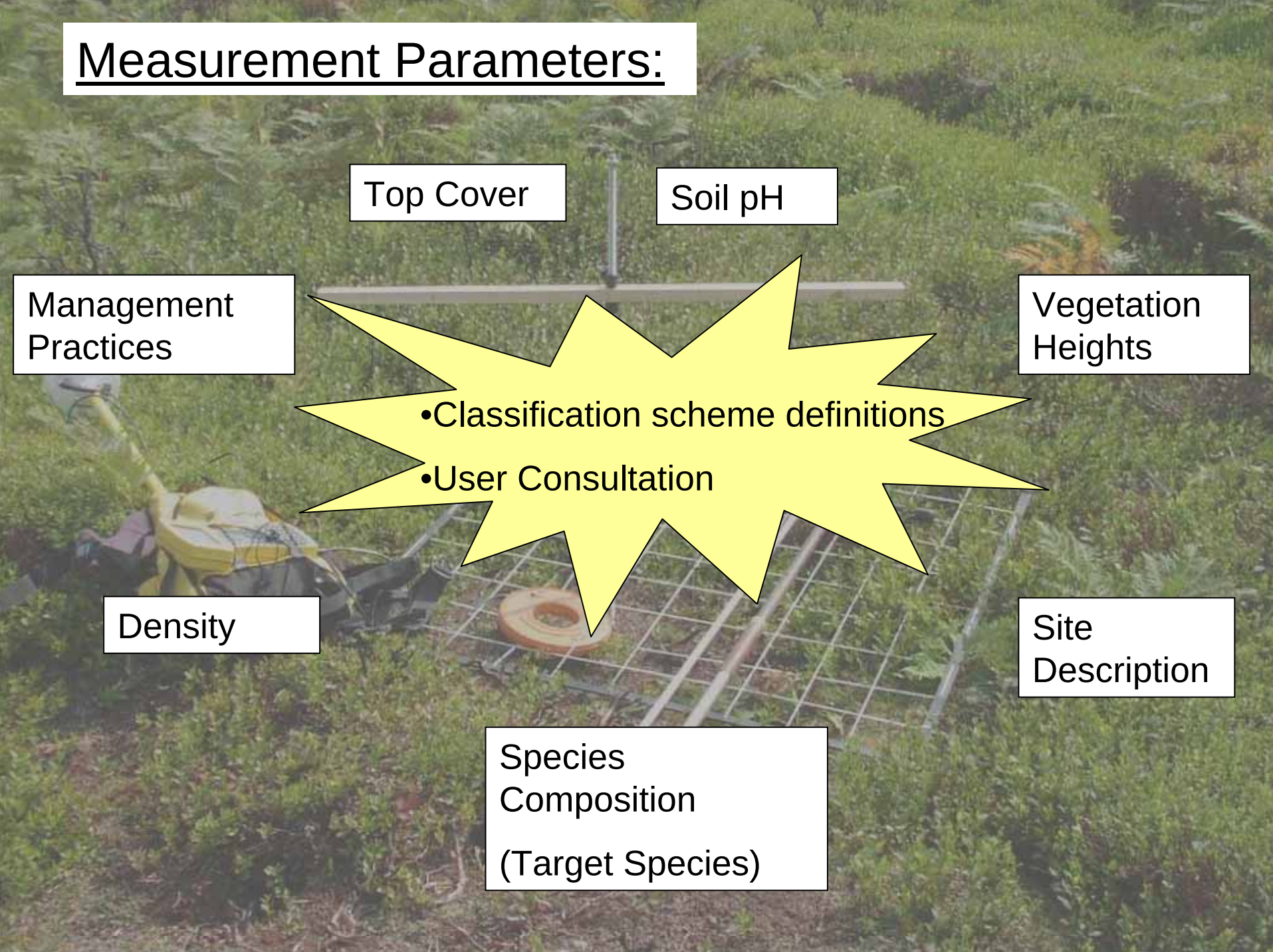
An intensive set of detailed point measurements

→ Extensive research into field survey design

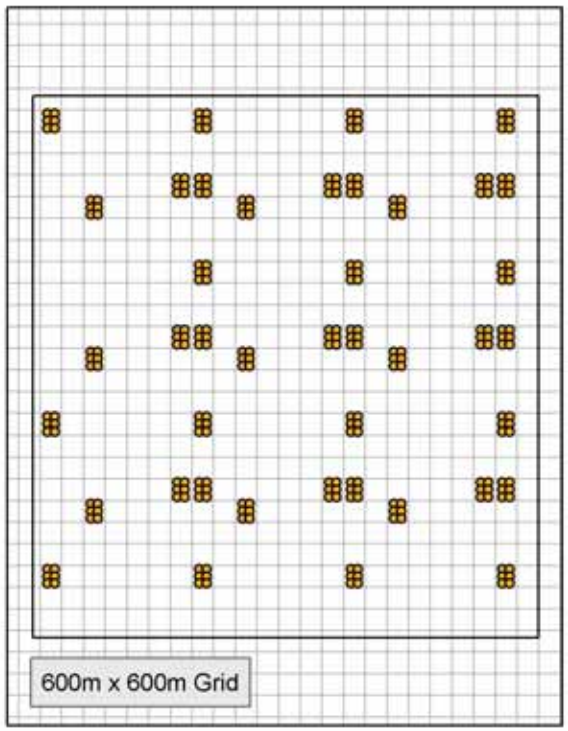
Factors considered include:

- Measurement techniques
- Point Sample Design
- Logistics
- Digital Field Data Capture

Measurement Parameters:

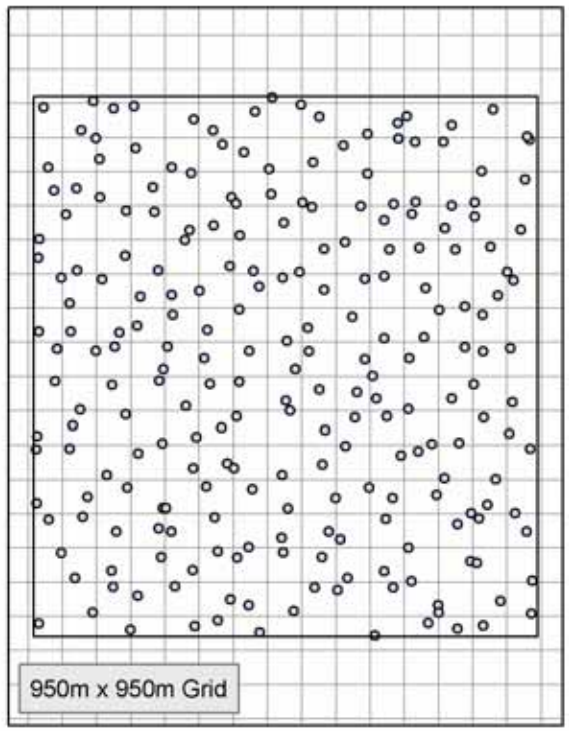


Sample Design:



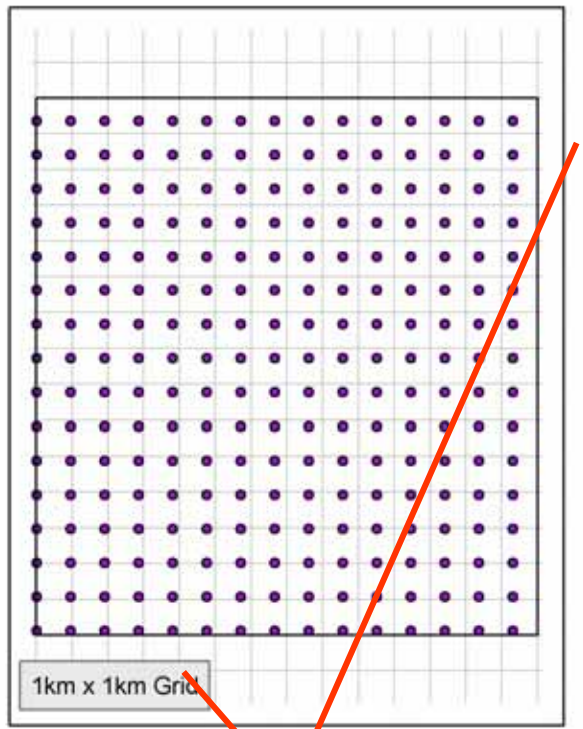
CLUSTERED DESIGN

SAMPLE POINTS: 252



SYSTEMATIC RANDOM DESIGN

SAMPLE POINTS: 234



SYSTEMATIC GRID

SAMPLE POINTS: 240

- Logistically viable
- Statistically valid
- Appropriate for later analysis

Logistics:

- Automatic organisation of fieldwork days
- Six sample points can be surveyed each day
- Fieldwork groupings are based on:

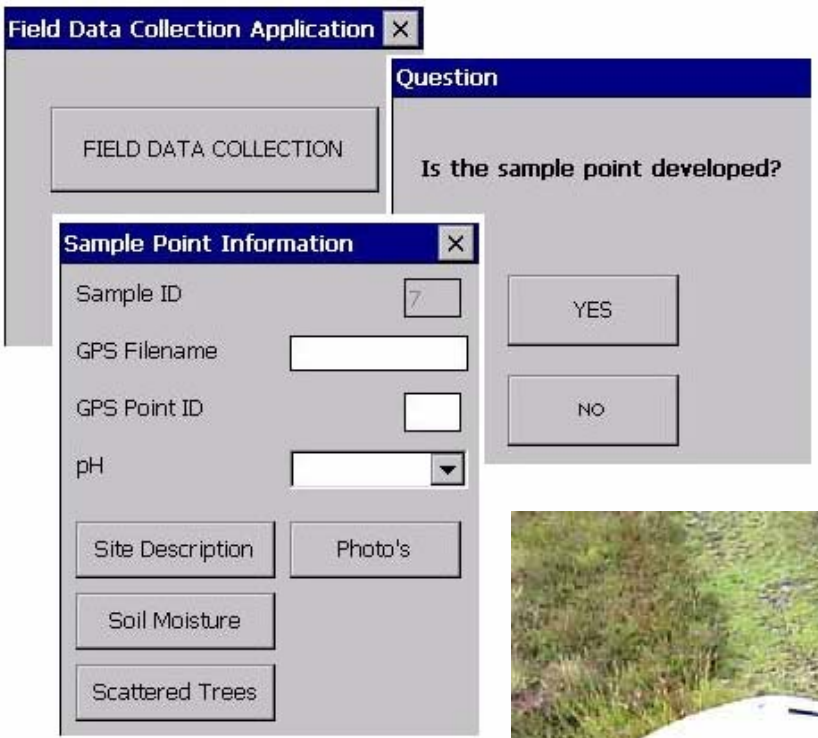
Access Permissions

Land Cover

Terrain

Access Routes

Development of a field data capture application



- Trimble GeoXT – Windows CE
- Steps through data collection
- Ensure consistent, complete records
- Eliminate paper based field notes
- Eliminate time consuming data entry

Project Status and Future Work:

Pilot Ground Survey 2003

Methodology Review

Full Ground Survey - July/August 2004

Collation of Field Data

Field Data Analysis

Integration of Field Data and Remote Sensing Data