Predicting national ecological flows at a regional scale
(on a local budget)

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1. Background

2. The problem

3. Methodology

4. Outputs

5. Validation

6. Conclusion
1. Background
Where are we?

WCC Ecological Services
Predicting national ecological flows at a regional scale
Ben Wood (Ecological Assistant)

Phase 1 - Polygon

Phase 1 - Linear

Accurate Data since 2001

20% resurveyed annually

Completely refreshed
Dataset every 5 years

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Connectivity scores for woodlands, grasslands and wetlands
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maps.warwickshire.gov.uk/greeninfrastructure
2. The problem
How do we identify whether connective routes are of Local or National Importance?

Strategic level connectivity data at a National or Regional scale

But how can a Local Authority quickly produce this sort of predictive mapping at a regional scale?

Condatis
Predicting national ecological flows at a regional scale
Ben Wood (Ecological Assistant)
3. Methodology
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Study area

Additional data sourced from:

- EcoRecord
- TVERC
- Staffordshire Ecological Record
- Buckinghamshire and Milton Keynes Environmental Records Centre
- Worcestershire Biological Records Centre
Missing data within study area:

- Leicestershire
- Nottinghamshire
- Gloucestershire
- Parts of Worcestershire
- Parts of Oxfordshire

Information gaps identified by spot-checking data sets with OS mapping and aerial photography

Land Cover Map 2007 (LCM2007)
Preparing the data using QGIS:
Preparing the data using QGIS:

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Preparing the data using QGIS:
4. Outputs
Condatis flow outputs:
Condatis flow outputs: 1km flow
Condatis flow outputs:

- Grassland
- Woodland
Condatis flow outputs: 1km flow
5. Validation
A validation exercise:
Predicting national ecological flows at a regional scale

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6. Conclusions
(and some limitations)
Condatis flow outputs:

Grassland

Woodland
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Changes in woodland flow resulting from HS2 works and landscaping

Before

After
A few limitations...
A few thoughts

- Hardware or software limitations?
- OK as an illustrative tool but output values need to be standardised for decision making
- External factors (i.e. surrounding landscape) need to be considered
- Ideas for future use of Condatis
  - Use ‘dropping’ to identify sites or parcels for enhancement
  - Prioritising enhancements from Biodiversity Offsetting

COMMENTS AND SUGGESTIONS MOST WELCOME
Thanks for listening!