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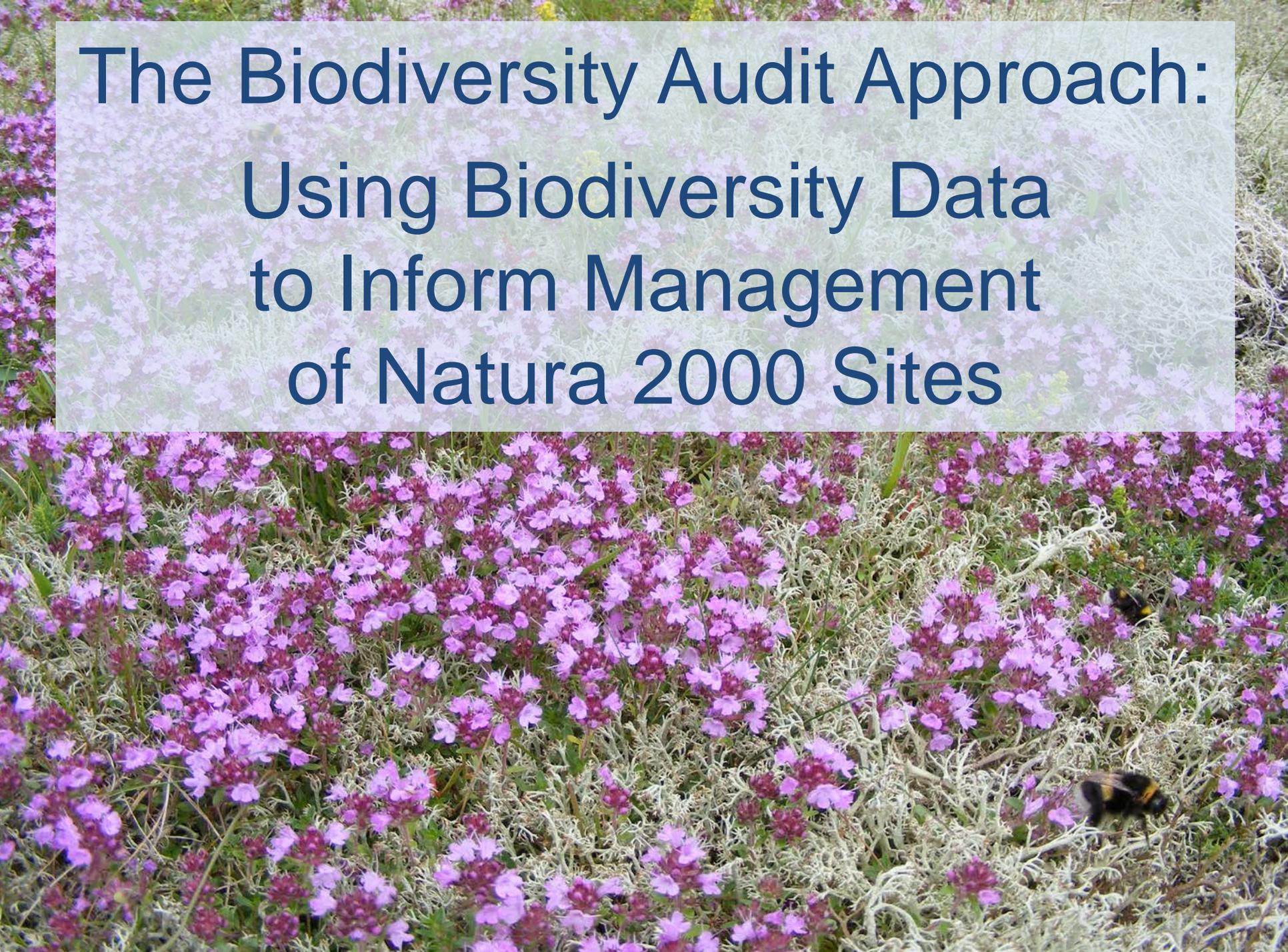
The Biodiversity Audit Approach

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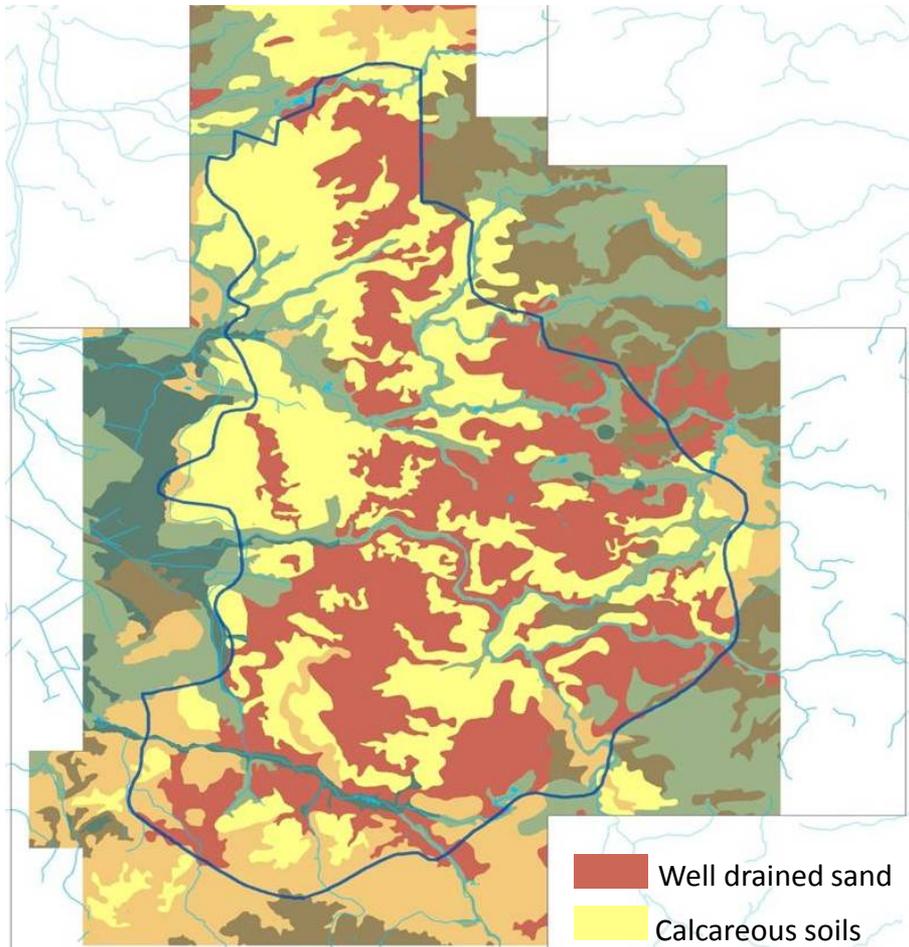
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Weds 22 February 2017 | Information Needs for Decision Makers

A photograph of a field of purple flowers, likely thyme, with a bumblebee visible in the lower right. The image is used as a background for a title slide. The text is overlaid on a semi-transparent white box.

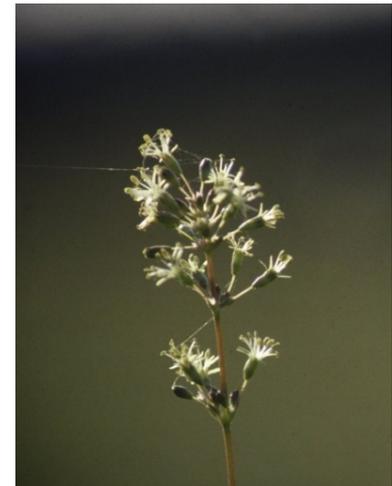
The Biodiversity Audit Approach: Using Biodiversity Data to Inform Management of Natura 2000 Sites

Breckland Region 1020 km²



- Well drained sand
- Calcareous soils
- Dry loamy soils
- Damp loams or clay
- Gleys
- Fen peat

- **Drier climate**
- **Sandy, low-nutrient soil**
- **Important biodiversity**
- **EU Natura 2000 Sites**
- **Historic human land-use**



Breckland SPA – 3 Bird Species



Lullula arborea



© Paul Hobson

Does management for these 3, support other important biodiversity?

Caprimulgus europaeus



Burhinus oedicnemus



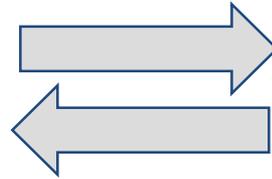
SAC (7,548 ha) – ‘EU Habitats’

- What is ‘Favourable Condition’?
- What management to fund?
- What are we managing for?



The Biodiversity Audit Approach

Biodiversity



Landscape

What biodiversity ?
Where is it ?
How to manage ?
(needs for multiple taxa)

Evidence-based
Simplified guidance
Spatial targeting
ES-BD trade-off



Integrated groups of species
Cost-effective delivery

Stakeholders: FC, NE, Norfolk & Suffolk Biodiversity Partnerships, Brecks Partnership, NBIS, SBRC, Plantlife, County Wildlife Trusts, Butterfly Conservation, Buglife

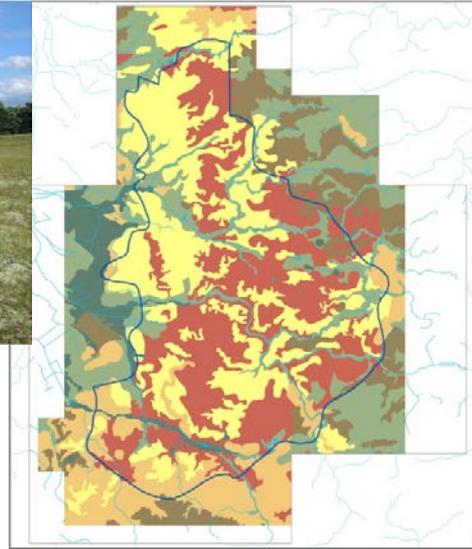
>800,000 Species Records

Advice from 80+ Expert 'Amateurs'



Taxonomist & Manager workshops: validating records, identifying regional specialists, discussing requirements, prescriptions and outcomes

What 'Biodiversity'?



12,845 species

2,149 priority
species

(BAP / S41, Nationally Rare,
Regionally-restricted)

72 regional
specialists



How to Manage?

Niche, Resource, Process

- micro-habitats
- vegetation structure
- ecological processes
- management actions

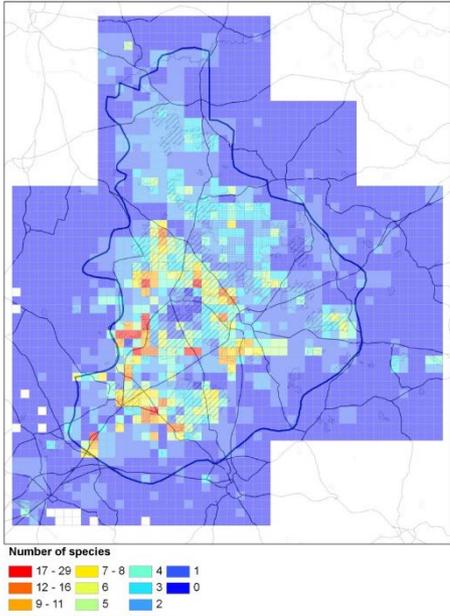


Match & Mis-match in Management

| | | OPEN (e.g. arable, heath) | OPEN + SCRUB | OPEN + WOODLAND | WOODLAND |
|-------------------------|-------------------------|------------------------------|---------------------------|-----------------|-----------------|
| Veteran/ Deadwood | | | | VETERAN 3 | VETERAN 48 |
| | | | DEAD WOOD 27 | | DEAD WOOD 95 |
| ?Grazing ?Dist | | | O + S 23 | O + W 85 | WOODLAND 156 |
| NO GRAZING | PHYSICAL DISTURBANCE | NO DIST + NO GRAZING 54 | NO DIST + NO GRAZING 8 | NO GRAZING 3 | |
| | | DIST + NO GRAZING 135 | DIST + NO GRAZING 9 | | |
| | | DIST + ?GRAZING 76 | | DIST 9 | |
| | | DIST + GRAZING 136 | DIST + GRAZING 13 | | GRAZING 8 |
| GRAZING | | NO DIST + GRAZING 81 | NO DIST + GRAZING 2 | | |
| Grazing Flux | SWARD MOSAIC 62 | SWARD MOSAIC 7 | | | |
| LANDSCAPE COMPLEXITY | | JUXTAPOSITION 54 | JUXTAPOSITION 7 | | |
| | | WIND BLOWN SAND 9 | | | |
| | | WET + OPEN + WOODLAND 68 | | | |
| | | OPEN + WOODLAND 60 | | | |

Evidence Supports 'Best Management'

'Management': Disturbed + Grazed
- 149 priority spp., 35 regional



Mis-match: 'Best Management' Not Widespread

£ 4.2 Million for 4 SSSI's (490 ha, 20 yr @ £430 ha⁻¹.yr⁻¹)



Biodiversity Audit



Cost-effective, evidence based

**SAC feature = veg composition
Inappropriate prescriptions**



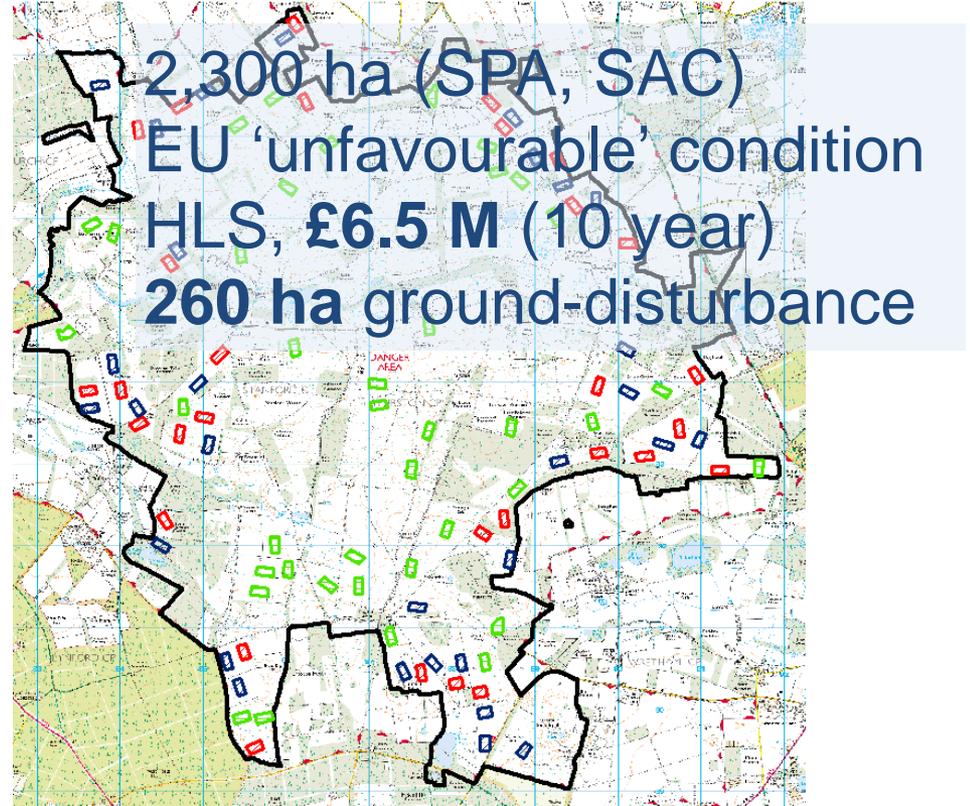
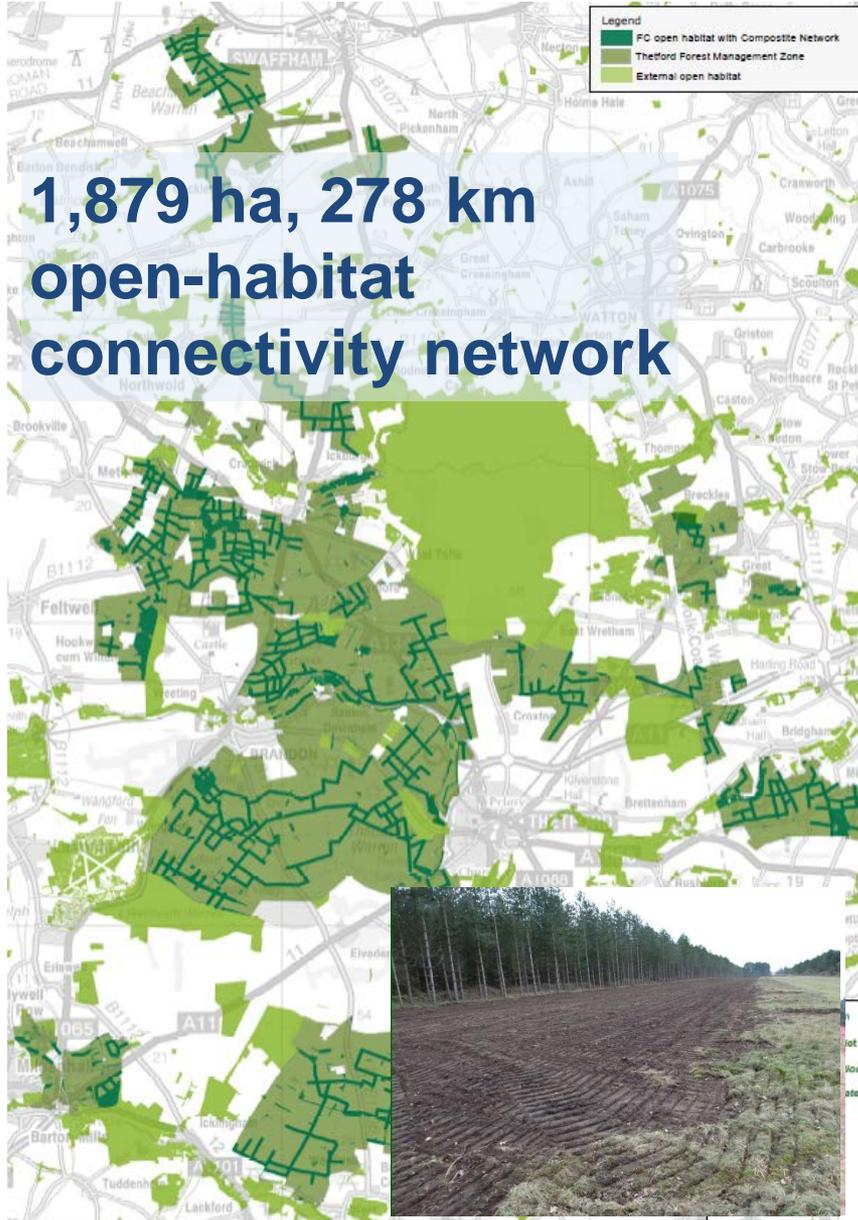
Priority biodiversity damaged



Supports **just 7%** of 1,237 priority terrestrial species



'Best Management' Rolled-out





The Biodiversity Audit Approach: Summary

- **Stakeholder management questions**
- **Biodiversity data:**
 - What species, but also...
 - Distribution, management needs (ecological processes, niche)
- **Citizen science & expert knowledge of stakeholders**
- **Define integrated 'Management Guilds'**
- **Evidence-base for better management**
- **Cost-effective support for priority biodiversity**



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Thank you!

Questions welcome



www.interreg.eu/bid-rex