

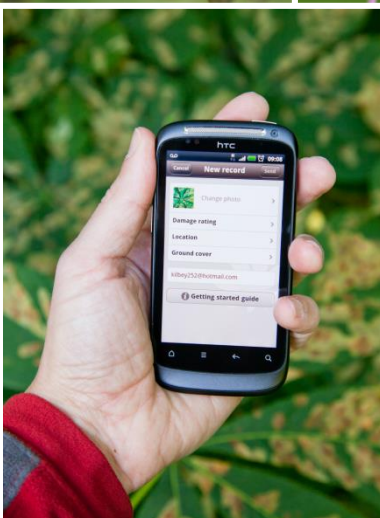
# How does biological recording contribute to monitoring for conservation and research?

## Matching gaps in recording to information needs

Michael Pocock



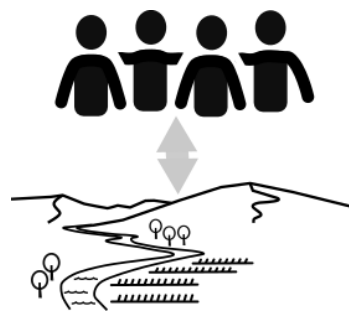








What benefits?





# Recording & use

Beauty, wonder  
Connections with people, places & nature  
Health & wellbeing  
→ Mapping



# Re-use

Evidence to support &  
evaluate decision-making  
(management & policy)



Welsh assembly, Senedd, Cardiff  
Julian Nitzsche via Wikipedia





JNCC Report  
No: 618

An assessment of the biodiversity information needs of the UK's  
environmental public bodies

Michael J.O. Pocock

On behalf of the Terrestrial Surveillance  
Development & Analysis (TSDA) Partnership:  
JNCC, Centre for Ecology & Hydrology and British Trust for Ornithology

August 2018



Llywodraeth Cymru  
Welsh Government



**Evidence to support &  
evaluate decision-making  
(management & policy)**

Welsh assembly, Senedd, Cardiff  
Julian Nitzsche via Wikipedia



# Unstructured



# Semi-structured



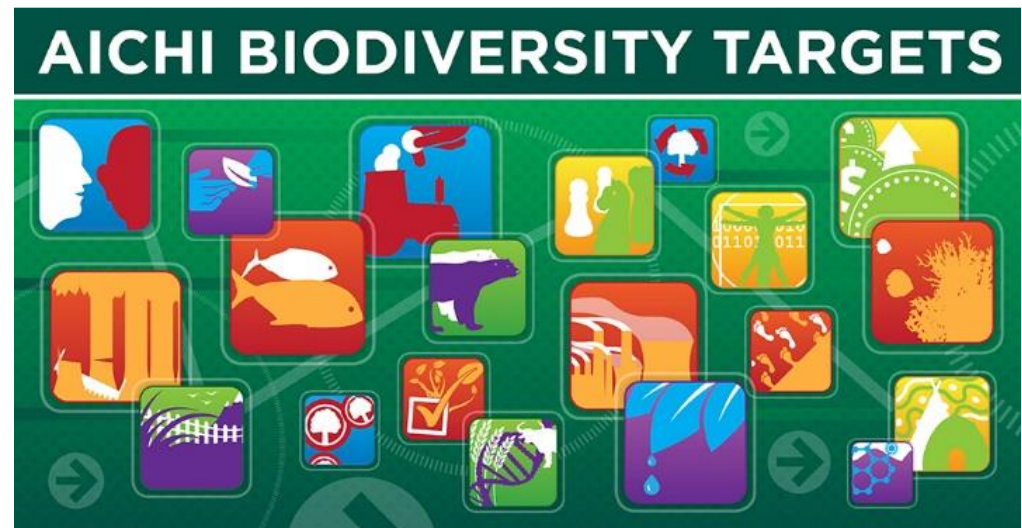
# Structured





# Needs for biodiversity information 1

- Operational & day-to-day needs
  - Providing advice – policy, decision-making (e.g. planning), regulatory
  - Mandated reporting (5-6 year cycle)



# Needs for biodiversity information 2

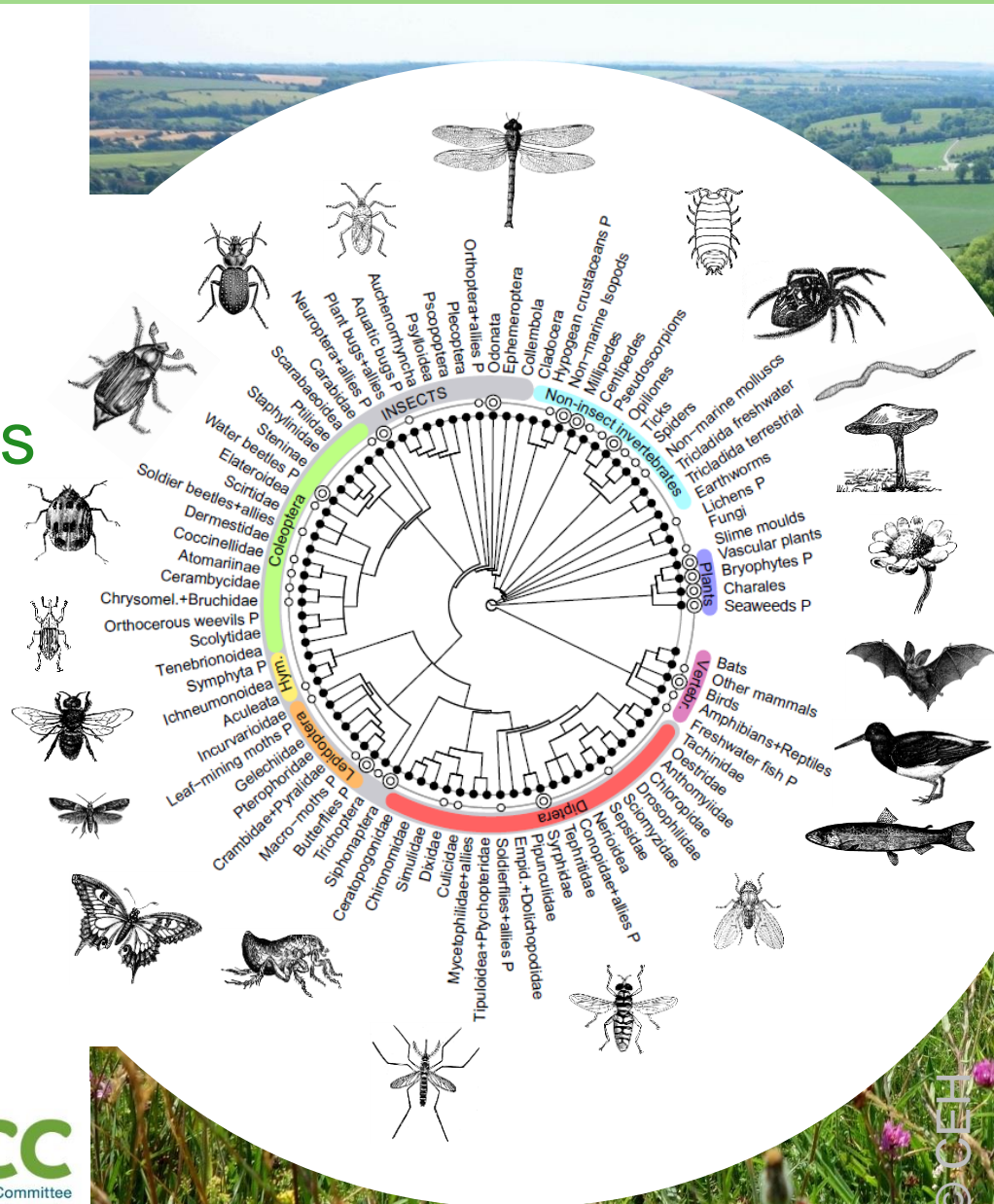
- Strategic needs
  1. State → ecological function
  2. Evaluate interventions
  3. Comprehensive, balanced metrics of ecosystem 'health'





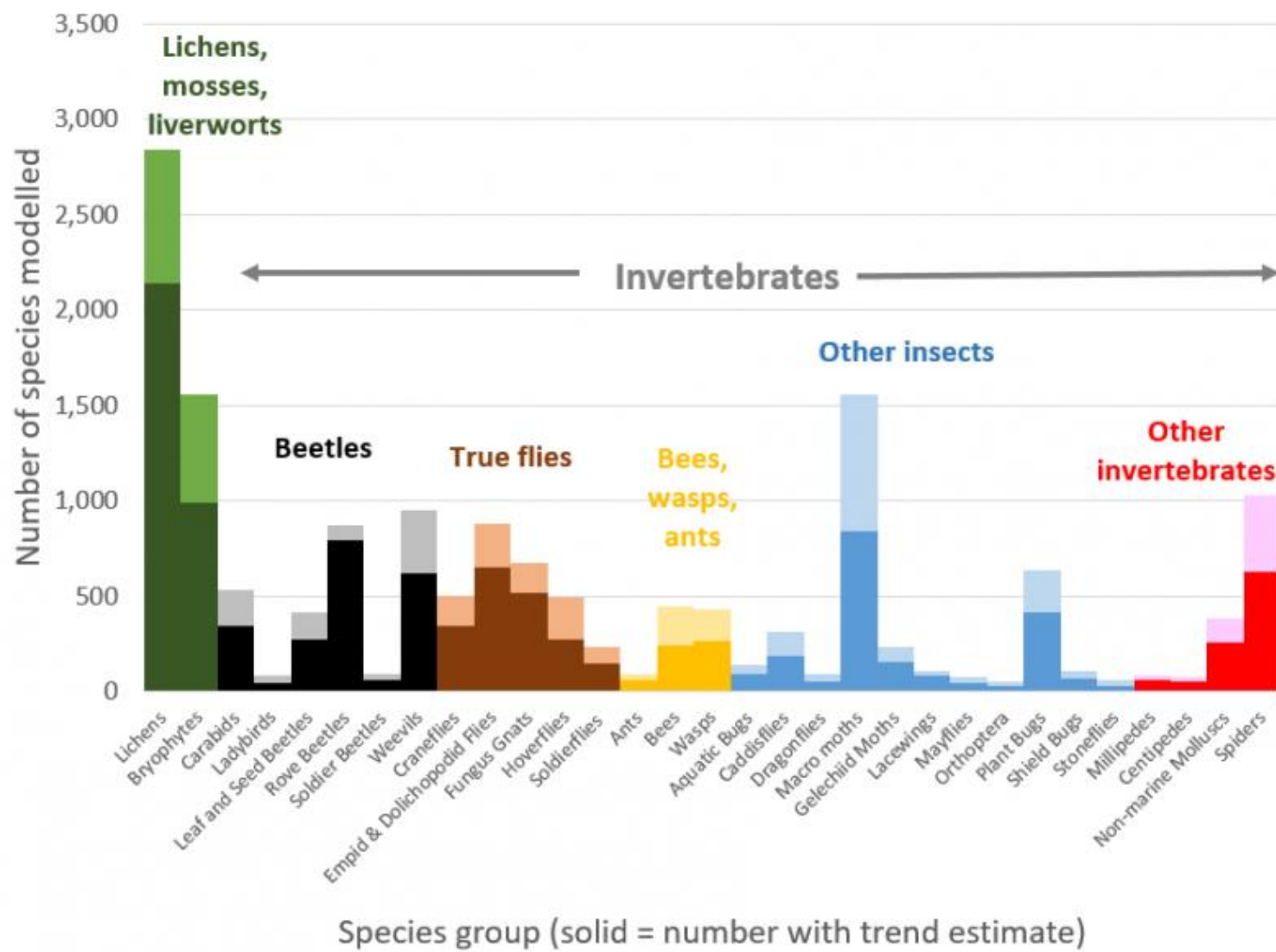
# Needs for biodiversity information 2

- Strategic needs
  1. State → ecological function
  2. Evaluate interventions
  3. Comprehensive, balanced metrics of ecosystem 'health'





# Occupancy trend modelling

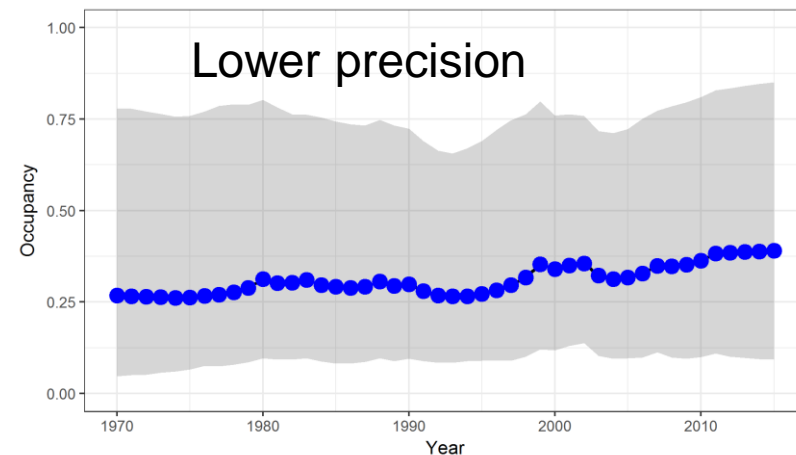
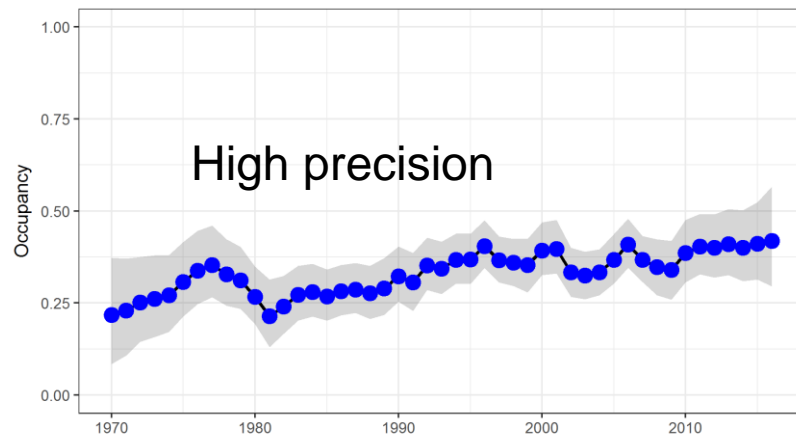


Charlie Outhwaite, Gary Powney, Tom August, Jack Hatfield,  
Colin Harrower, Bjorn Beckmann and Nick Isaac



# Occupancy trend modelling

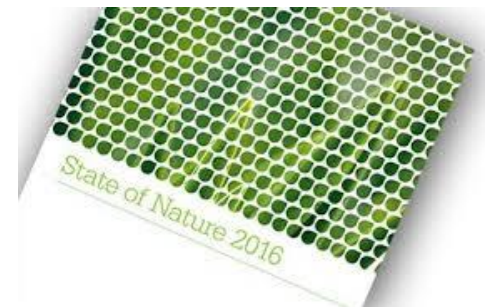
- Occurrence + detection = occupancy trends
- Models can take weeks to run!



Rules of thumb for

‘acceptable’  
precision

‘high’  
precision



*Work done under TSDA project with JNCC & BTO*



# Identifying gaps & opportunities?

Predicted precision:



High



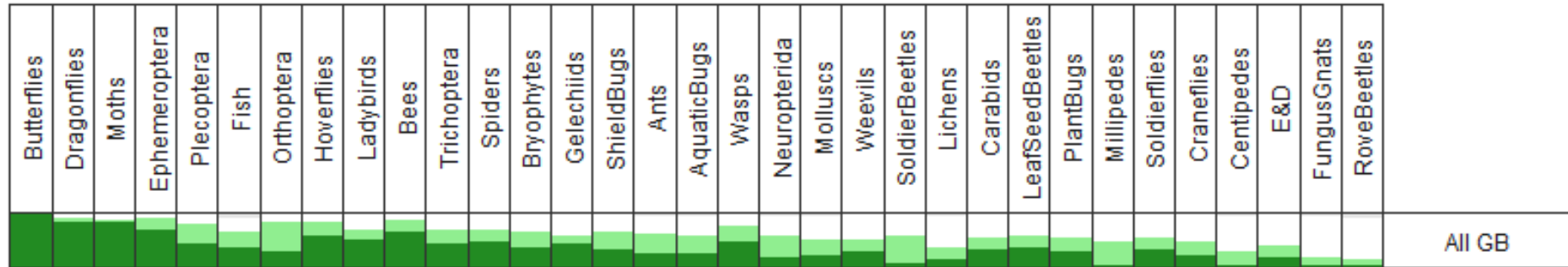
Acceptable



Poor



No data



# Identifying gaps & opportunities?

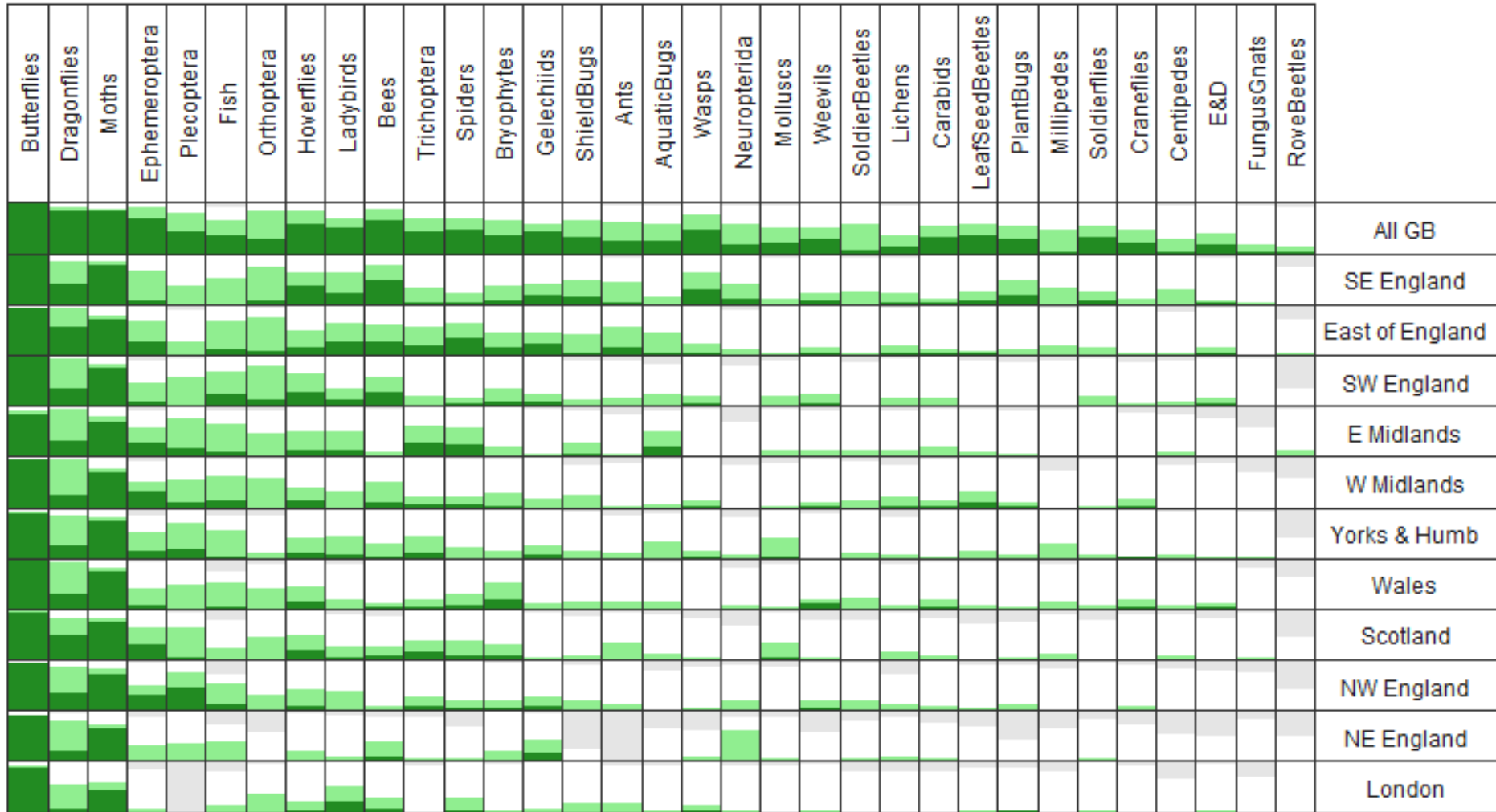
Predicted precision:

High

Acceptable

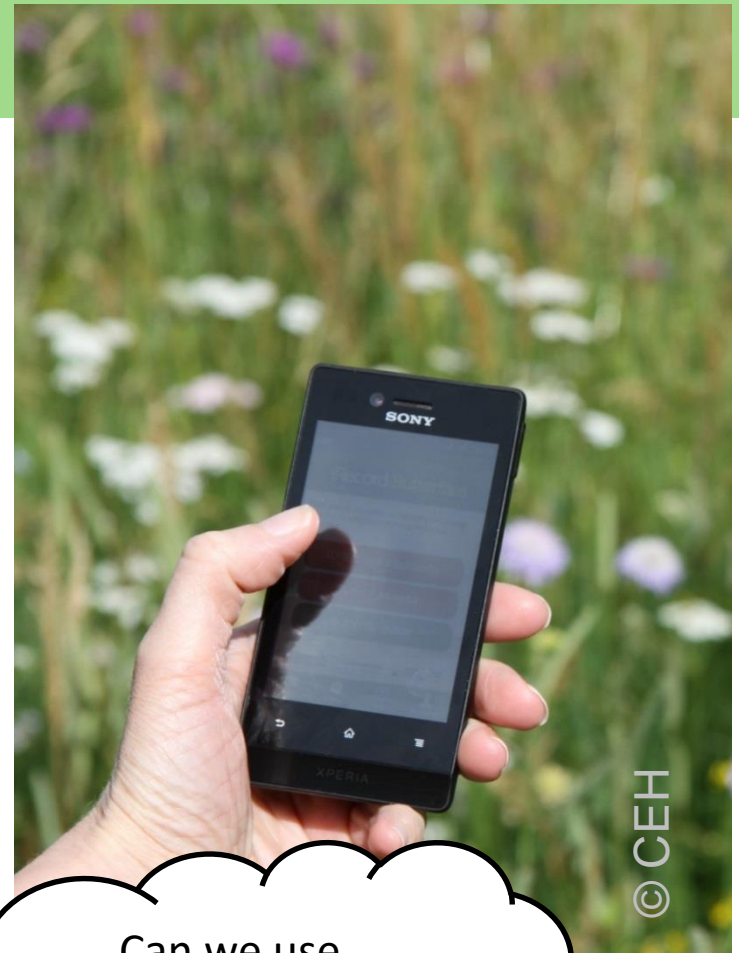
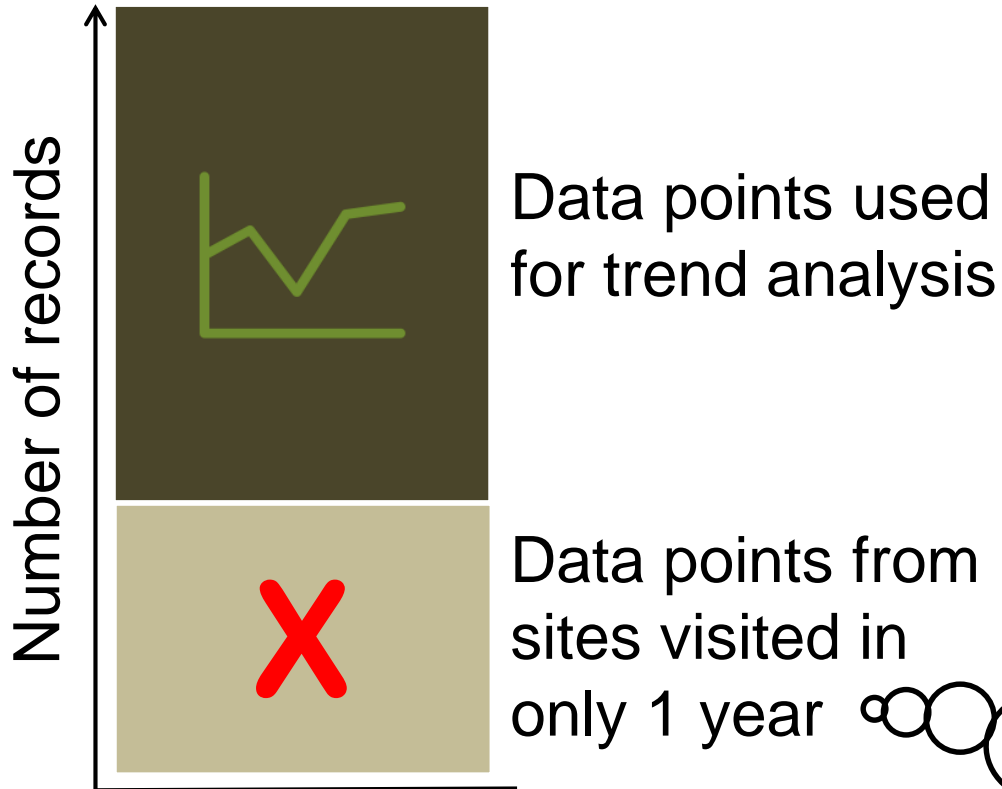
Poor

No data





# An easy win?



Can we use technology to 'nudge' people to re-visit these sites?

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