



# ***REGIONAL HABITAT DATA PROJECT***

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HEREFORDSHIRE  
BIOLOGICAL  
RECORDS  
CENTRE

**Staffordshire  
Ecological  
Record**

**EcoRecord**

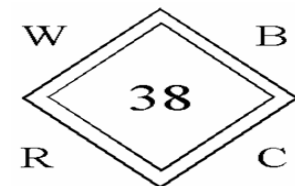
The Ecological Database for  
Birmingham and the Black Country



**Worcestershire  
Biological  
Records  
Centre**



**Shropshire**  
County Council





# Project Aims

## Overall aim

produce GIS layer of the priority BAP habitat across the region

## Stage 1 aim

habitat audit of the regional habitat data resource across the West Midlands



- **BAP Priority Habitats in the West Midlands**
- **Criteria for reliability and data confidence levels**
- **Data providers**
- **Summary of assessed datasets results**
- **Existing data collation processes**
- **Existing GIS resource**
- **Recommendations**

B A P P r i o r i t y H a b i t a t s i n t h e W e s t M i d l a n d s R e g i o n		
B A P P r i o r i t y H a b i t a t	C h a n g e s t o h a b i t a t s	I n v e n t o r i e s w i t h G I S l a y e r
A r a b l e f i e l d m a r g i n s ( C e r e a l f i e l d m a r g i n s )	C l a r i f i c a t i o n o f s c o p e	0
B l a n k e t b o g		1
C a l a m a r i a n G r a s s l a n d s ( P o s t - i n d u s t r i a l h a b i t a t s )	N e w	0
C o a s t a l a n d f l o o d p l a i n g r a z i n g m a r s h		1
E u t r o p h i c s t a n d i n g w a t e r s		0
H e d g e r o w s ( A n c i e n t a n d / o r s p e c i e s r i c h h e d g e r o w s )	W i d e n s c o p e	0
I n l a n d r o c k o u t c r o p a n d s c r e e h a b i t a t s	N e w	0
L o w l a n d b e e c h a n d y e w w o o d l a n d		1
L o w l a n d c a l c a r e o u s g r a s s l a n d	C l a r i f i c a t i o n o f s c o p e	1
L o w l a n d d r y a c i d g r a s s l a n d		1
L o w l a n d f e n s a n d f l u s h e s ( F e n s )	N a m e c h a n g e	1
L o w l a n d h e a t h l a n d	C l a r i f i c a t i o n o f s c o p e	1
L o w l a n d m e a d o w s		1
L o w l a n d m i x e d d e c i d u o u s w o o d l a n d		1
L o w l a n d r a i s e d b o g		1
L o w l a n d w o o d - p a s t u r e a n d g r a s s l a n d	W i d e n s c o p e	0
M e s o t r o p h i c l a k e s		0
O l i g o t r o p h i c a n d d y s t r o p h i c l a k e s	N e w	0
O p e n m o s a i c h a b i t a t s o n p r e v i o u s l y d e v e l o p e d l a n d ( P o s t - i n d u s t r i a l h a b i t a t s )	N e w	0
P o n d s		0
P u r p l e m o o r - g r a s s a n d r u s h p a s t u r e s		1
R e e d b e d s		1
R i v e r s ( C h a l k h e a d w a t e r s )	N e w	0
T r a d i t i o n a l o r c h a r d s	N e w	0
U p l a n d b i r c h w o o d s		1
U p l a n d c a l c a r e o u s g r a s s l a n d	C l a r i f i c a t i o n o f s c o p e	1
U p l a n d f l u s h e s , f e n s a n d s w a m p s	N e w	0
U p l a n d h e a t h l a n d		1
U p l a n d m i x e d a s h w o o d s		1
U p l a n d o a k w o o d		1
W e t w o o d l a n d		1

## Criteria for data reliability and data confidence levels

<b>Reliability criteria</b>			
<b>Survey Type</b>	<b>Age of Survey</b>		
	< 5 years	5-10 years	> 10 years
NVC quadrat	High (7)	Medium (6)	Medium (5)
NVC rapid	Medium (6)	Medium (5)	Medium (4)
Phase 1 and target notes	Medium (5)	Medium (4)	Low (3)
Phase 1 map only	Medium (4)	Low (3)	Low (2)
ESA/ SSSI site description/ species list	Medium (5)	Medium (5)	Medium (4)
AP, Landcover	Low (3)	Low (2)	Low (1)
Expert knowledge of site deterioration/ loss	High (7)	Medium (6)	Medium (5)

# Criteria for data reliability and data confidence levels

<b>Confidence levels</b>					
	<b>Source (time)</b>	<b>Boundary</b>	<b>Polygon</b>	<b>Reliability of habitat determination</b>	<b>Description of levels of certainty of habitat determination</b>
<b>Definitely is</b>	< 5 years Grassland and Heathland/Fen < 10 years Woodland	Accurate Boundaries	Entire area has been classified as the habitat	Good	Sufficient source information to clearly determine the priority habitat for a given polygon
<b>Definitely present within Polygon but not accurately mappable</b>	< 5 years Grassland and Heathland/Fen < 10 years Woodland	Not enough information for accurate mapping	Entire area has been classified as the habitat	Average	The habitat is known to be present in the polygon, but it either co-occurred with other habitats as a mosaic or the source data is not good enough to separate them
<b>Probably the priority habitat but some uncertainty of interpretation</b>	> 5 years Grassland and Heathland/Fen > 10 years Woodland	Accurate Boundaries	Only parts of the field has been classified as the habitat	Poor	Insufficient source information to clearly determine the habitat type
<b>Probably present within polygon but not accurately mappable</b>	> 5 years Grassland and Heathland/Fen > 10 years Woodland	Not enough information for accurate mapping	Entire area has been classified as the habitat	Poor	Insufficient source information to clearly determine the habitat type
<b>Not present but close to definition</b>	Any age	Accurate Boundaries	Entire area has been classified as the habitat	Average	Sufficient information to determine that the habitat is close to the priority habitat but does not meet the quality standards

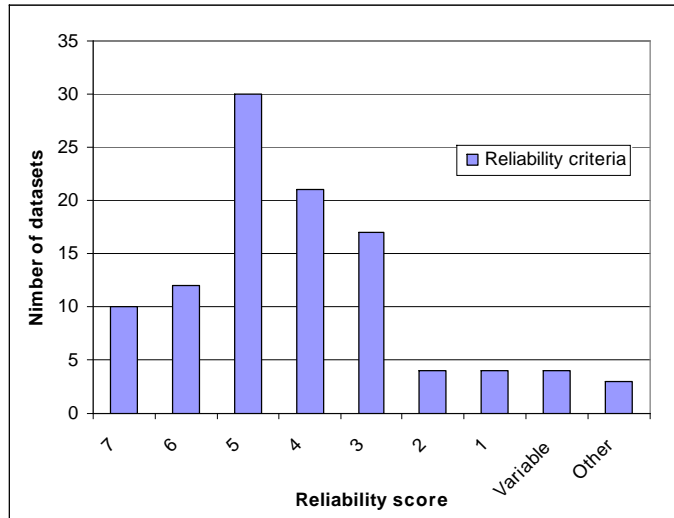
<b>Interpretation Quality</b>		
	<b>Data Source</b>	<b>Translation of Habitat data to Priority Habitats</b>
<b>Good</b>	BAP Priority Habitat survey, NVC Survey, Forestry Commission Guide, Peterken stand types, Corine, Habitats Directive Annex 1	Strong relationship/ Correspondence
<b>Average</b>	BAP Habitat monitoring from DEFRA RDS assessments.	Strong or fair relationship
<b>Poor</b>	Phase 1 Surveys, Broad Habitat	Weak relationship

# Data Providers

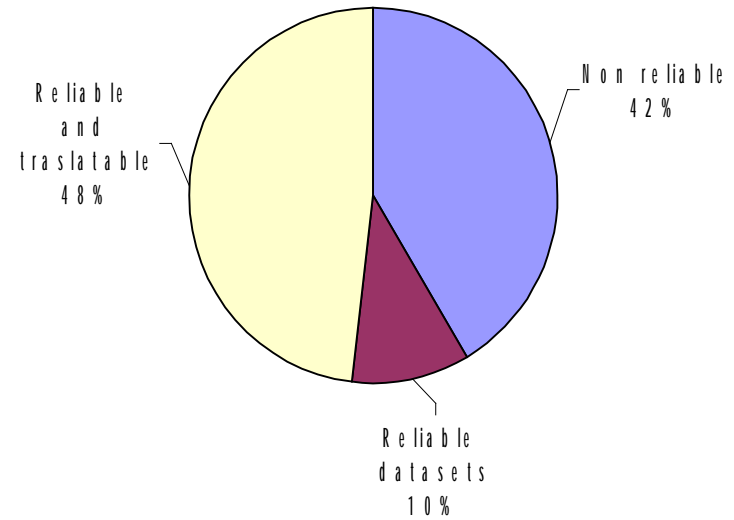
British Waterways	Malvern Hill Conservators
Environment Agency	National Forest Company
	National Trust
Forestry Commission	Natural England
EcoRecord	Peak District NP Authority
Herefordshire BRC	RSPB
Shropshire CC	Severn Trent Water
Staffordshire Ecological Record	South Staffordshire Water Company
Warwickshire BRC	Wildlife Trusts - B & BC
Worcestershire BRC	Wildlife Trusts - Herefordshire
LAs - B & BC	Wildlife Trusts - Shropshire
LAs - Herefordshire	Wildlife Trusts - Staffordshire
LAs - Shropshire	Wildlife Trusts - Warwickshire
LAs - Staffordshire	Wildlife Trusts - Worcestershire
LAs - Warwickshire	Woodland Trust
LAs - Worcestershire	

# Summary of Assessed Datasets

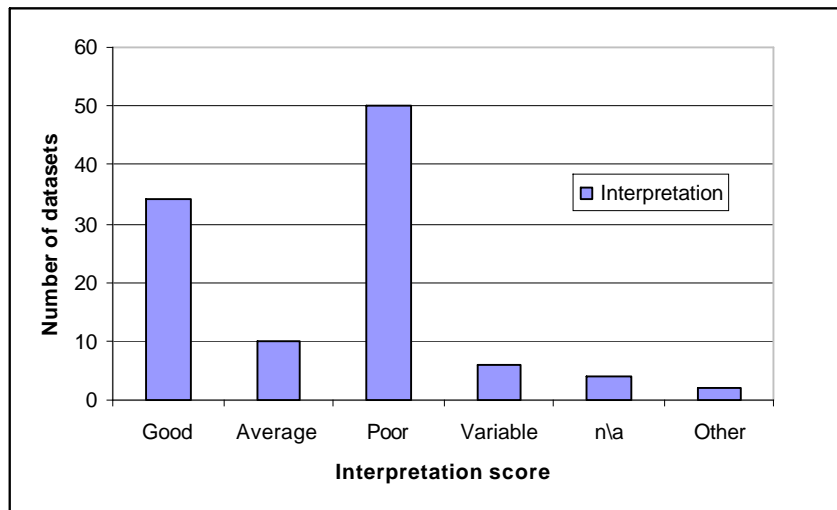
Datasets by reliability score



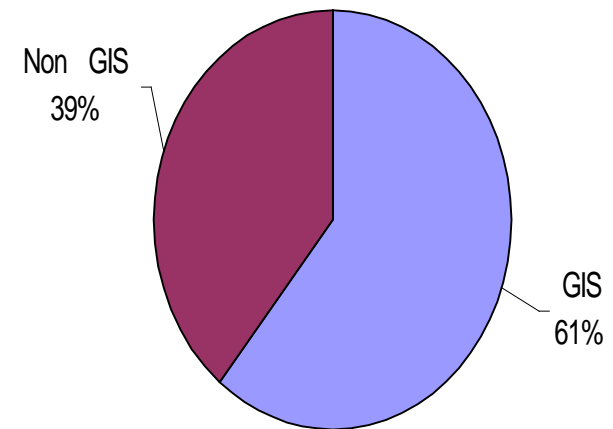
Reliability score



Interpretation score

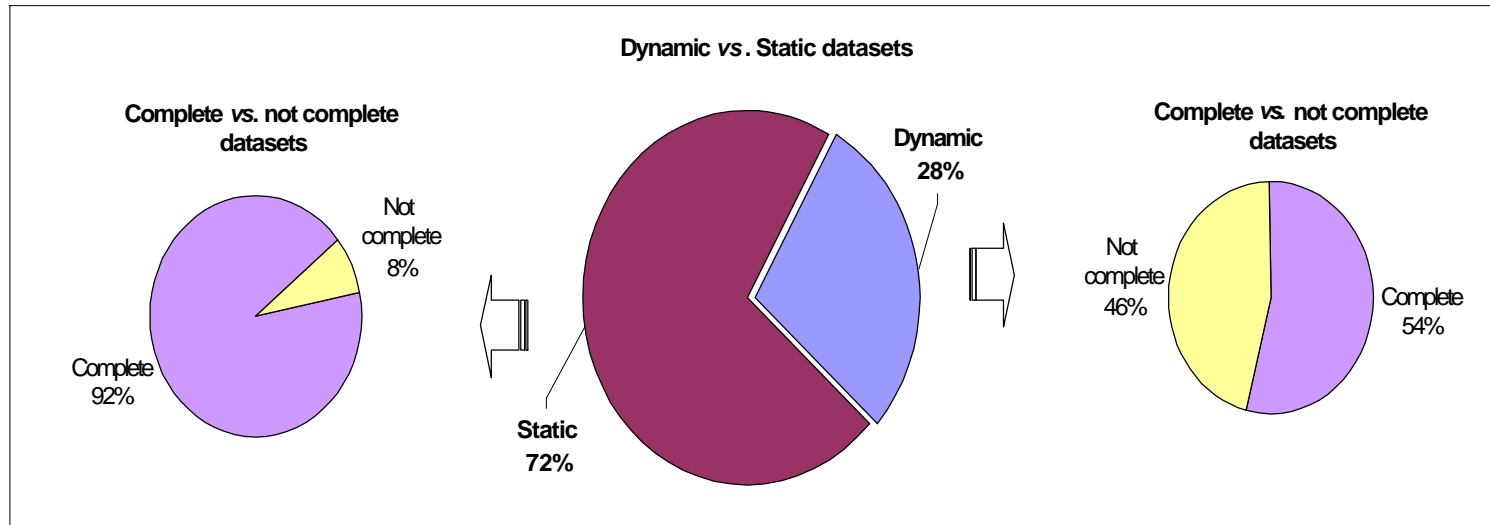


Reliable datasets  
GIS vs. Non GIS datasets

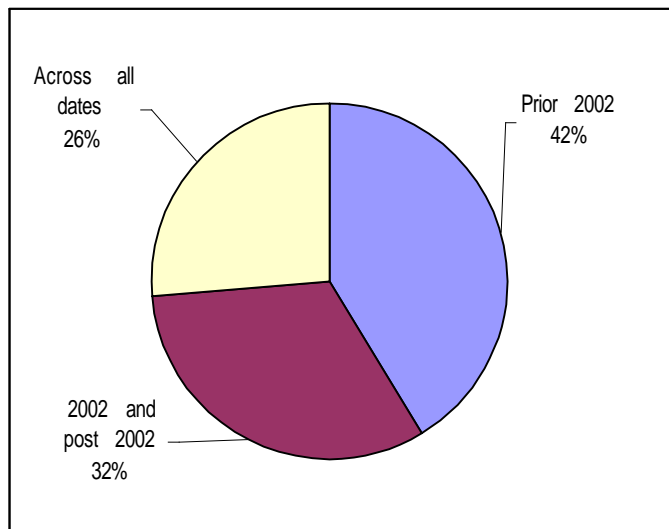


# Summary of Assessed Datasets

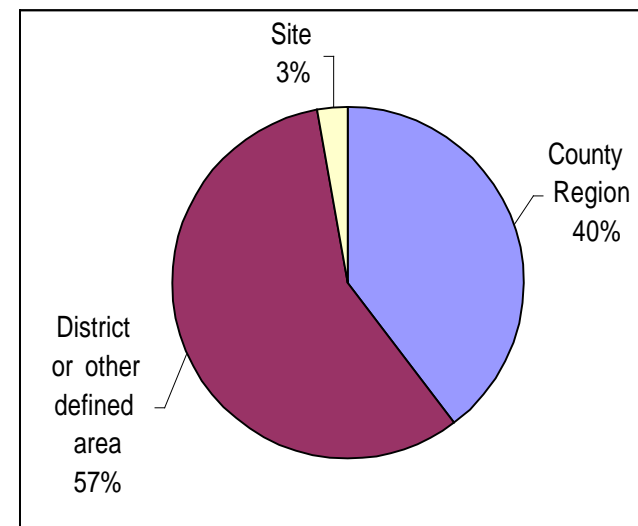
## Dynamic and Static datasets



## Time coverage

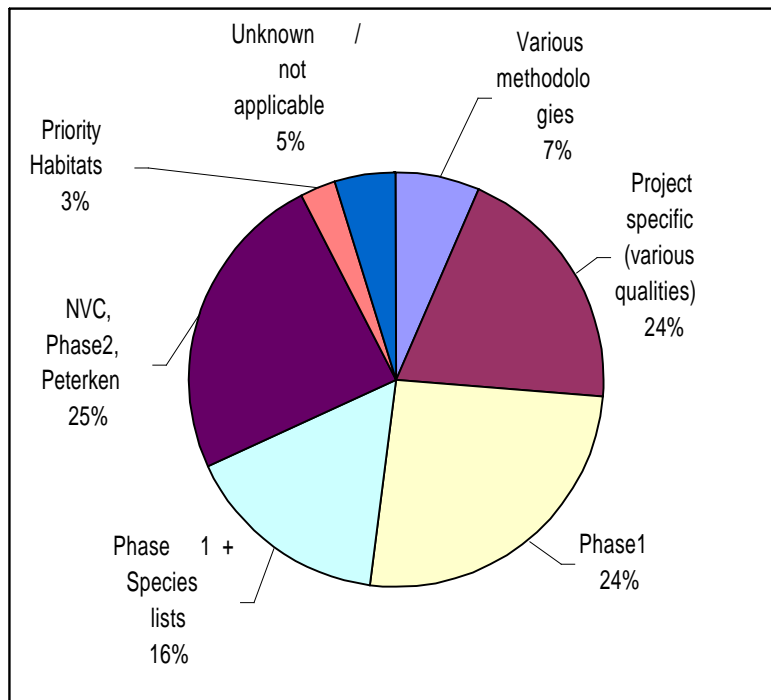


## Area coverage

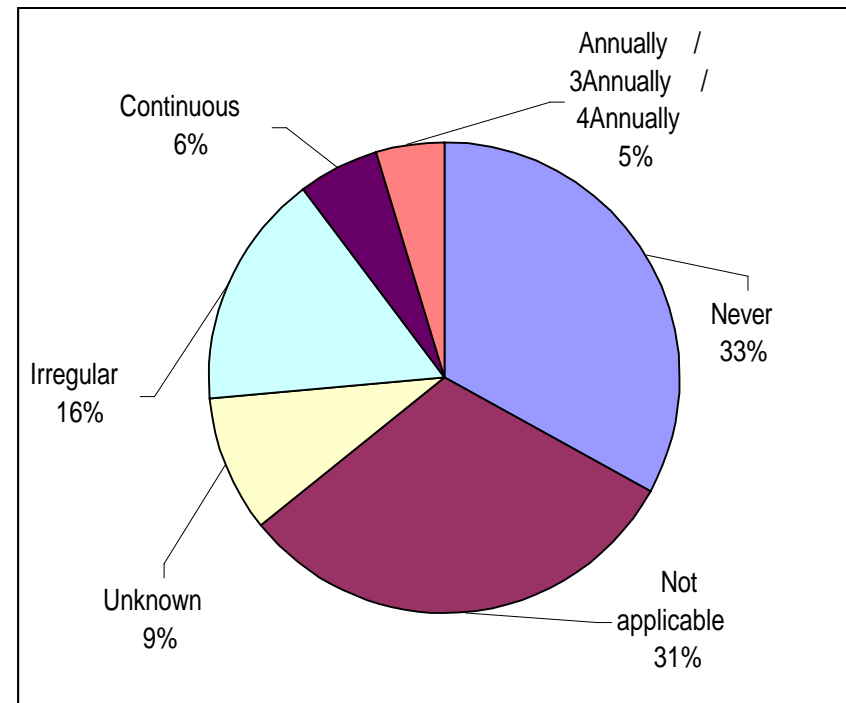


# Summary of Assessed Datasets

## Survey methodologies



## Frequency of update



# Summary of Assessed Datasets

## Other

- Hardly any datasets had a metadata file in place
- Quality of species data
- Access/use constraints
- In principle, no problem in terms of combining the GIS datasets at regional level
- Number of sites digitised resulted in confusing answers as some of the datasets were not based on sites

# Existing data collation processes

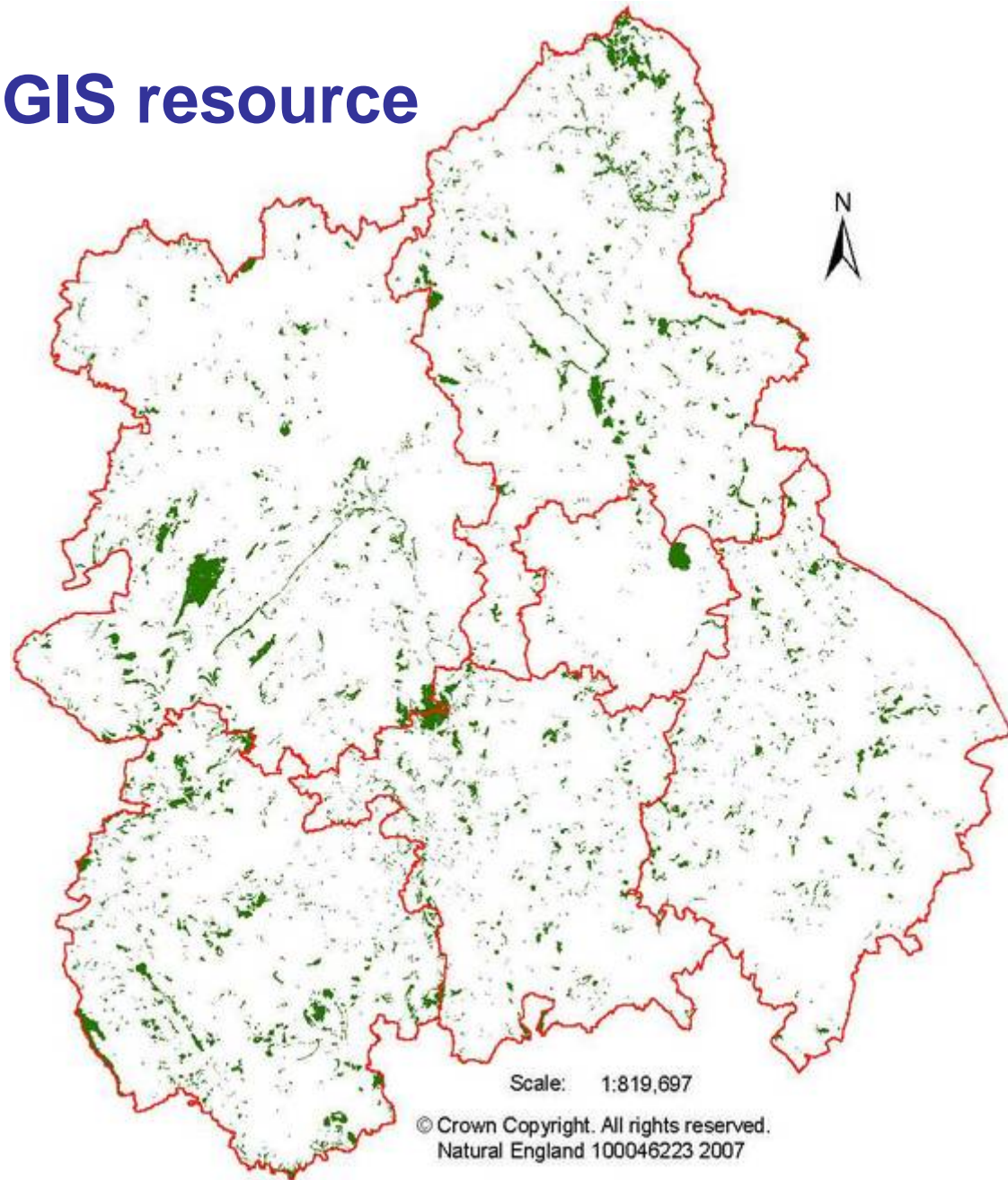
## Datasets considered

- Dynamic dataset
- Data reliability
- Translation to BAP Priority Habitat
- GIS format

<i>Dataset name</i>
<i>Shropshire Habitat Mapping Project</i>
<i>Habitat Biodiversity Audit (HBA)</i>
<i>Warwickshire, Coventry and Solihull Wildlife Sites Project</i>
<i>Worcestershire Special Wildlife Sites</i>
<i>Worcestershire Habitat Inventory</i>
<i>Staffordshire Habitat surveys 2003 onwards</i>
<i>HBRC BAP Priority Habitats (Baseline)</i>
<i>Malvern Hills NVC Data</i>
<i>Natural England SSSI Site Files</i>
<i>Ian Bolt Report</i>
<i>Herefordshire Nature Trust NVC Survey of Nature Trust Reserves</i>
<i>Native Woodland Restoration Herefordshire Project</i>

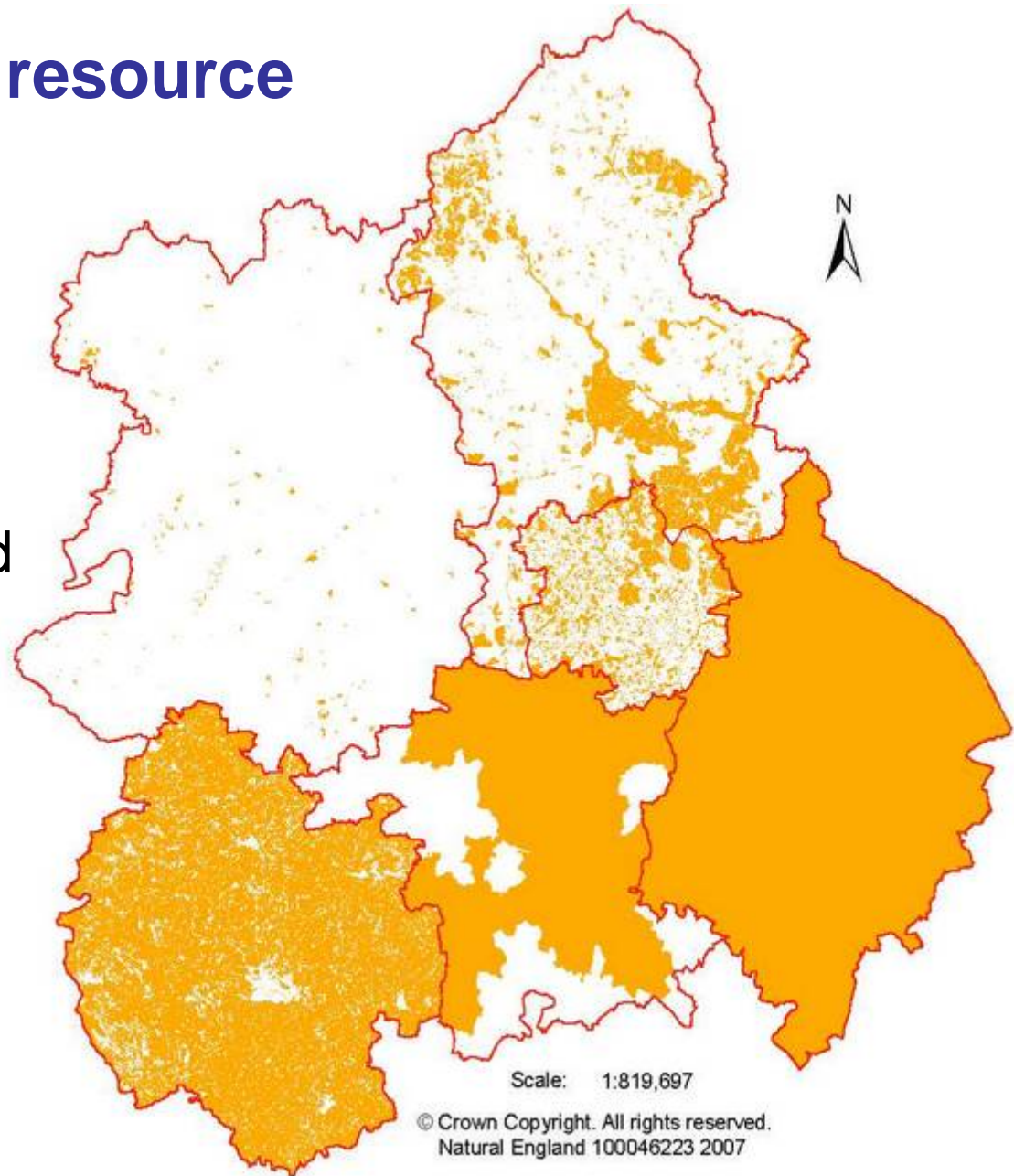
## Existing GIS resource

Current GIS  
Habitat Inventory  
coverage



## Existing GIS resource

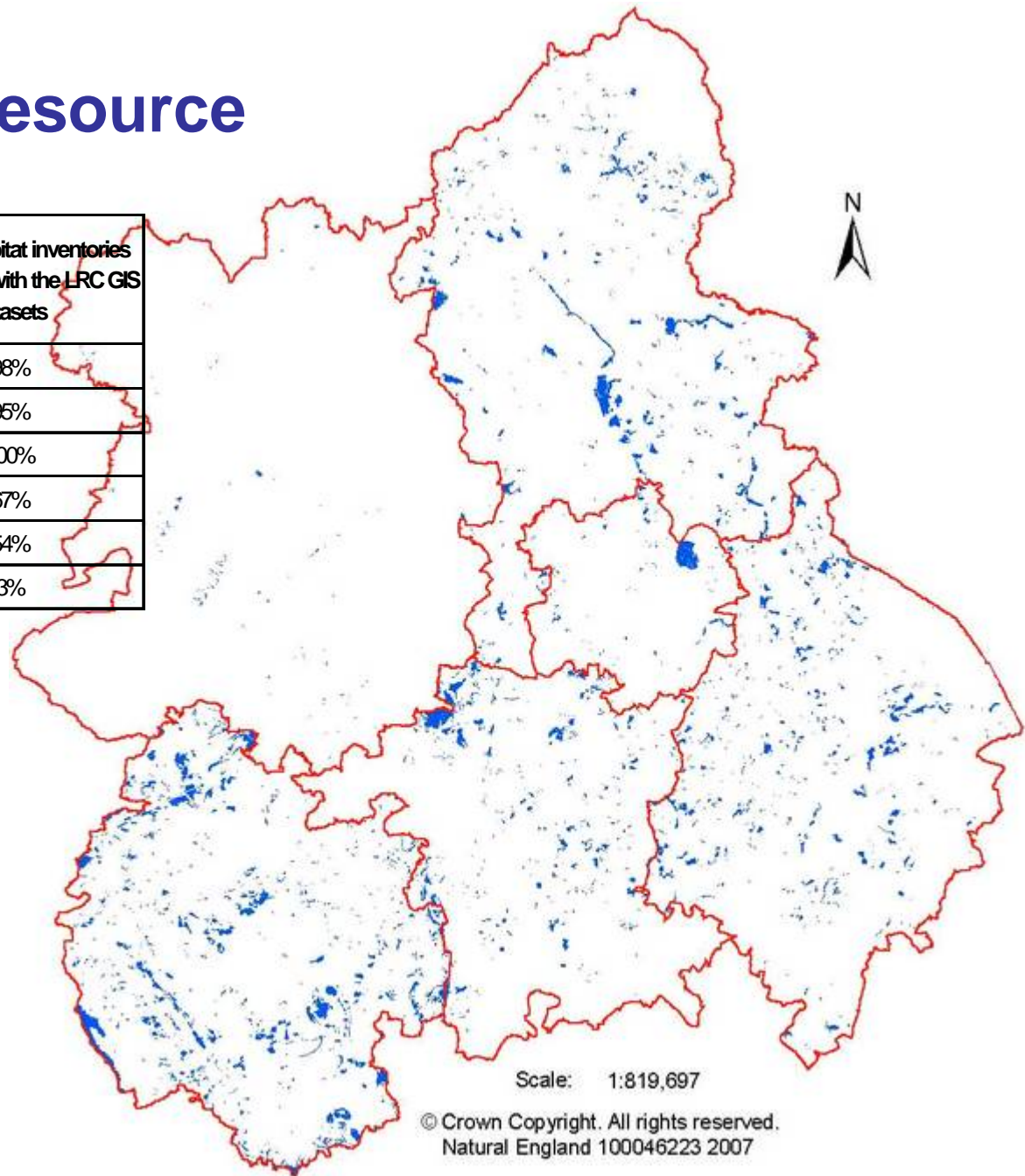
Current GIS  
Habitat data covered  
by WMLRCs



# Existing GIS resource

	Intersect between Habitat Inventory coverage and area covered by LRC GIS datasets	% of the habitat inventories that overlap with the LRC GIS datasets
Herefordshire	14,692.81	98%
B&BC	1,476.72	95%
Warwickshire	7,200.96	100%
Worcestershire	5,732.41	67%
Staffordshire	8,404.28	54%
Shropshire	520.55	3%

Overlap between  
Habitat Inventories  
and  
LRC GIS datasets



# Outcomes

- List of reliable GIS datasets with priority for translation
- List of reliable non-GIS datasets with priority for digitising and translation
- List of ongoing datasets that can be used to update the inventories
- List of data providers' main point of contact for habitat data

# Recommendations

- Contact outstanding providers.
- Assess outstanding datasets.
- Obtain **BAP Priority Habitat definitions**, including reviewed and new habitats.
- **Develop** or decide criteria or **methodology** to **translate** from the different types of habitat survey methodology to **BAP habitat definitions**.
  - Investigate pilot project carried out in Staffordshire.
- **Implement agreements for sharing information** and/or establish cost of the dataset with the identified contact providers with reliable GIS datasets
  - Implement data sharing agreements with the organisations with ongoing projects.
- Use the criteria for data confidence level and interpretation to assess individual polygons when digitising.

# Recommendations

- **Translate to BAP Priority Habitats** reliable GIS datasets
- **Digitise and translate** reliable datasets
- Create additional **guidelines that allow an easier conversion from Phase 1 to BAP Priority Habitat** (without having to do an NVC).
  - Example BRERC evidence sheets (investigate)
- Offer / Obtain **funding** for the additional or for on-going BAP Priority Habitat projects.
- **Encourage** organisations to include **BAP habitat surveying** or use of created BAP additional guidelines.
- **Implement agreements** for data exchange with other organisations for ongoing projects from the beginning, and also for existing data.
- **Make efficient use of data collected for other purposes**, for example use of axiophytes to verify habitats, maybe in stage 2.

# Recommendations

- **Further contact** needs to be made **with data providers'** organisations to:
  - Raise awareness of regional data collation;
  - Raise awareness of metadata creation;
  - Implement data exchange agreements;
  - In general, have a closer working relationship; there are not too many organisations for this to be unfeasible!!
- Create a **central contact point for habitats data** through, for example, a regional LRC. Such a contact would then be aware of ongoing projects in the region; if the inventory is not updated regularly it would become obsolete and redundant.
- Decide **where to house the GIS dataset**, ideally, with that central contact point.
- **Implement initial GIS layers** of those habitats without a GIS layer.
- Co-ordinate efforts with the National Inventory programme.



# REGIONAL HABITAT DATA PROJECT



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