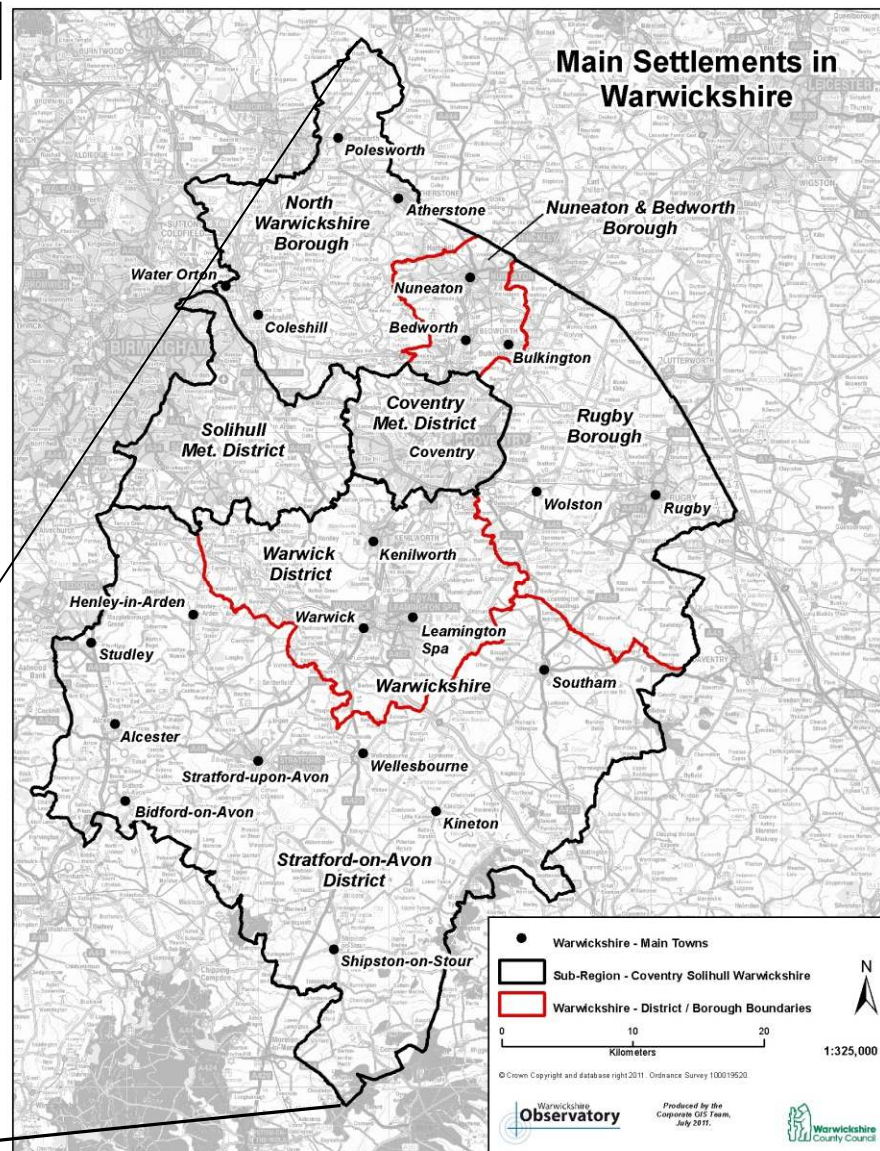


# No Net Loss – Session 1

## Contents

- Biodiversity Offsetting in Warwickshire Coventry and Solihull (WCS)
- Strategic Approach

## Partners



## Supporters

THE UNIVERSITY of York



# Biodiversity Offsetting

## What is it?

The Business and Biodiversity Offsets Programme defines biodiversity offsets as:

*“measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate prevention and mitigation measures have been implemented”.*

Defra’s ‘Natural Environment White Paper’ announced a new voluntary approach to offsetting and would test this in a number of pilot areas. In association with Natural England & Defra.

Biodiversity Offsetting is considered as a mechanism to enact National Planning Policy Framework (2012) sustainable development principles involving *“seeking positive improvements in the quality of the built, natural and historic environment, as well as in people’s quality of life, including (but not limited to):*

- *making it easier for jobs to be created in cities, towns and villages;*
- *moving from a net loss of bio-diversity to achieving net gains for nature;*
- *replacing poor design with better design;*
- *improving the conditions in which people live, work, travel and take leisure; and*
- *widening the choice of high quality homes.”*

# Biodiversity Offsetting

## What is it?

The biodiversity offsetting pilots will run for two years from 1<sup>st</sup> April 2012.

Developers in pilot areas required to provide compensation for biodiversity loss under planning policy can choose to do so through biodiversity offsetting, once the mitigation hierarchy has been applied and compensation is seen as the only option available:

### Mitigation hierarchy:

- Impacts are avoided.
- If impacts are unavoidable, impacts are mitigated against.
- If mitigation is not possible, impacts are compensated for as a last resort (e.g. through biodiversity offsetting).

# Biodiversity Offsetting

In England, the Mitigation Hierarchy is supported within the National Planning Policy Framework (2011):

*The planning system should contribute to and enhance the natural and local environment by **minimising impacts** on biodiversity and **providing net gains** in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing **coherent ecological networks** that are more resilient to current and future pressures" (NPPF, 2011)*

SO ...

What does the England Biodiversity Metric do?

# Biodiversity Offsetting

## What Triggers Biodiversity Offsetting?

- ? All development that has land-take
  - ? Householder applications: extensions (lawns and patios)
  - ? Minor Applications:
  - ? Major Applications:

### Caveat:

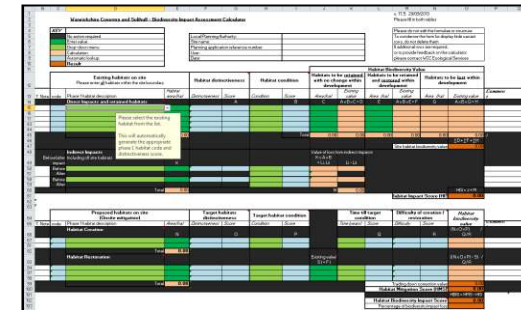
Some forms of landuse change that may result in impacts to biodiversity may trigger the need for calculating Biodiversity Offsetting. Examples of this might include the change of woodland to recreational use or the change of a semi-improved grassland field to public open space. These situations will be evaluated on a case-by-case basis.



### Step 1 – Calculate **Biodiversity Impact Assessment**

**STAGE 1** - Survey and measure all habitats on site and then list:

- Onsite habitats and to be lost
- Onsite habitats to be retained (avoidance)
- Onsite habitats to be retained and enhanced
- Offsite habitats to be indirectly impacted
- Determine the development areas and habitats to be created on site.



**STAGE 2** - Calculate the biodiversity value and subsequent impact for each habitat.

Habitat biodiversity value = hectares x distinctiveness x condition

**Habitat Impact Score (HIS)** = biodiversity loss value of a. and d.

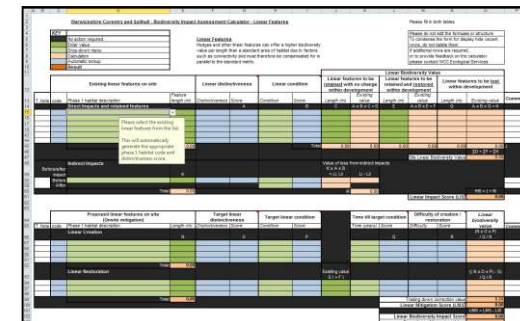
**STAGE 3** - Repeat for the proposed site taking into account:

- Hectares of development and onsite habitat mitigation (creation and enhancement).
- Difficulty and temporal risk factors for habitats to reach their target value.
- Habitat downtrading (loss of species rich grassland cannot be compensated for with gardens)

**Habitat Onsite Compensation Score (HOMS)** = biodiversity gain of c. and e.

**STAGE 4** - Calculate the **Biodiversity Impact Score** = HOMS – HIS

Years to Target Condition	Multiplier
5	1.2
10	1.4
15	1.7
20	2.0
25	2.4
30	2.8
32	3



## Step 3 – Find potential offset sites with suitable biodiversity gain assessed using same risk factors

### Spatial Risk Multiplier

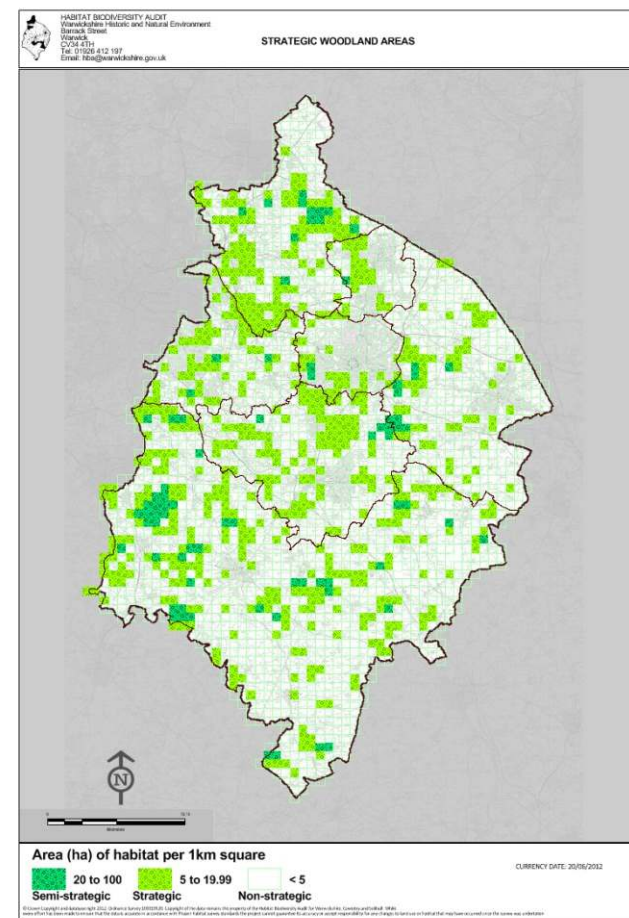
Location Parameters	Multiplier
Location is within a strategic offsetting area.	1
Location is within a semi-strategic offsetting area.	2
The location is within a non-strategic offsetting area.	3

### Difficulty of Restoration/Creation Risk Multiplier

Difficulty of Restoration/ Creation	Multiplier
Very high/impossible	10
High	3
Medium	1.5
Low	1

### Temporal Risk Multiplier

Years to Target Condition	Multiplier
5	1.2
10	1.4
15	1.7
20	2.0
25	2.4
30	2.8
32	3



**Available  
Biodiversity = Target Value - Existing Biodiversity Value  
Units**





Biodiversity Offset units = **3.38** units (19.52 – 16.14)

Mitigation hierarchy. Scheme amended to retain and enhance best existing habitats to reduce biodiversity loss.



### Existing Units

Existing Biodiversity value  
of Species Poor  
Grassland = **8.2** units  
(4.1ha)

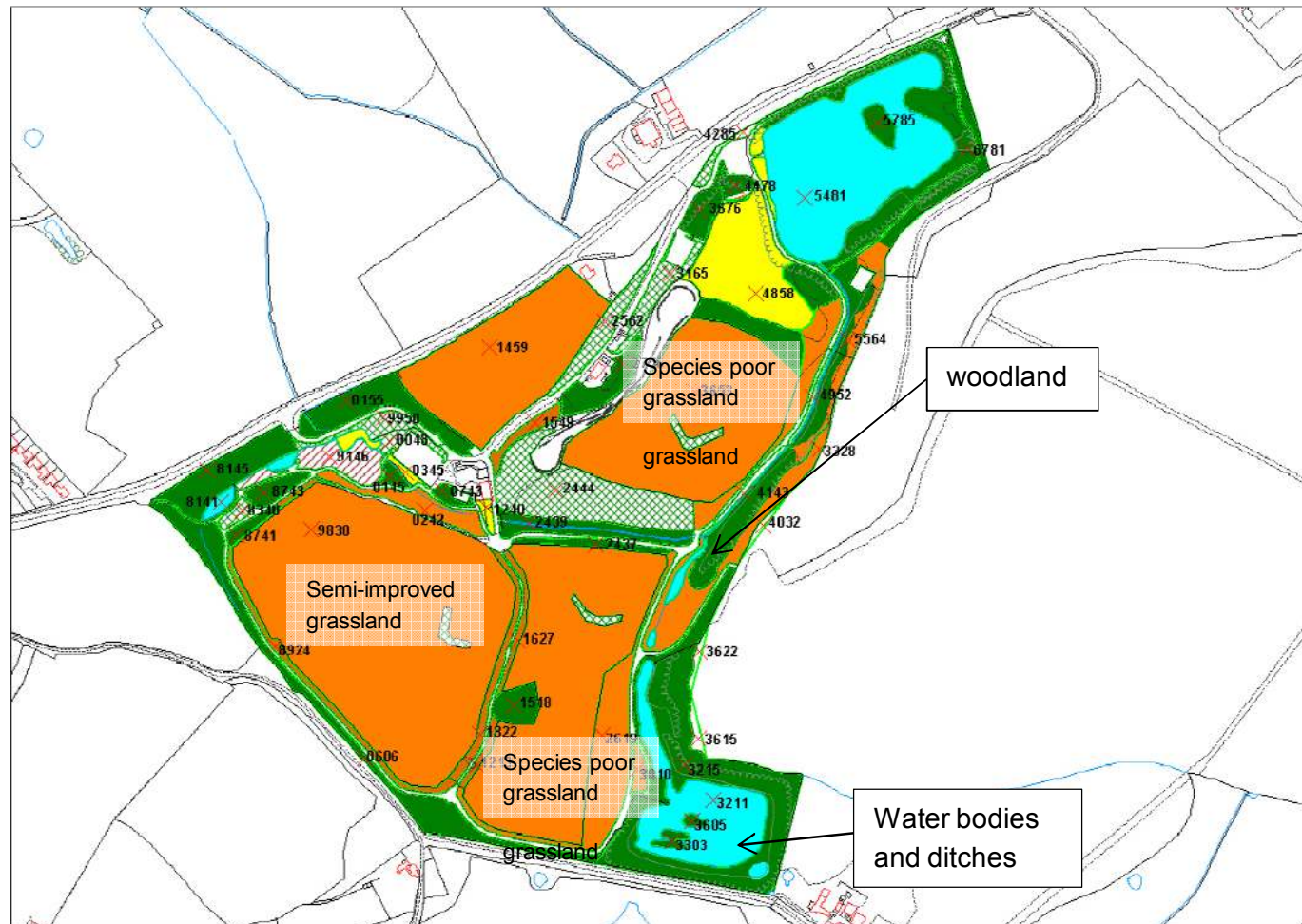
Existing Biodiversity value  
of Poor Semi-improved  
Grassland = **41.6** units  
(10.4ha)

### Potential Credits

To enhance the Species Poor Grassland to Semi-improved Grassland in 10 years would generate **5.86** credits gain.

To enhance the *species-poor* Semi-improved Grassland to *species-rich* Semi-improved Grassland in 10 years would generate **9.90** credits gain

The Total Grassland units available on the site = **15.76** credits



We have used the metrics on 60+ sites of which...

- 8 have been approved with negotiated Section 106 obligations
- some have either been granted permission with offsetting, where
  - we are awaiting instructions for Section 106
  - mitigation proposals within ownership boundaries
  - outline permissions reliant on reserve matters to re-evaluate scheme

The rest...

- some have been refused on non-ecological reasons
- some have been withdrawn ... unknown reasons
- some showed a biodiversity gain or minimal impact, and
- some were granted permission without offsetting.

The Environment Bank has over 40 donor sites awaiting assessments of offset potential and credits

## Conclusions ... so far

- Offsetting comes after the NPPF (mitigation hierarchy and Local Plan Policies)
- Offsetting comes in two parts
  - Biodiversity Impact Assessment
  - If negative ... Offset
- Ecological Consultants do no more extra work
- Ecological Consultants and Landscape Architect must talk to apply hierarchy
- Applicants have the ability to consider ecology in financial terms ... viability ... at an early stage
- Distinctiveness scores are useful in Strategic Planning
- Need data to ensure that the offsets are going to the right place

**NEED TO HAVE ACCESS TO A LOCAL AUTHORITY ECOLOGIST**



## Conclusions ... so far

- Stimulate the Rural Economy
  - ✓ Invest in natural resources – will require skills and employment - LEP
  - ✓ Incentivise landowners to maximise natural resources – pollination studies
  - ✓ Management of woodlands – wood supply chains, skilled workforce etc
  - ✓ Create irrigation ponds – climate change agenda
  - ✓ Protect natural resources – compliment natural resource payments
- Will compliment other strategies ... LEP, LNP, Ecosystem Services, Climate Change, Flood Risk, Catchment Plans, etc, etc, etc...

**NEED TO HAVE ACCESS TO A LOCAL AUTHORITY ECOLOGIST**

# **Biodiversity Delivery**

**Grants** – Landfill Tax (SITA Trust, BIFFA, WREN) or HLF etc

**Planning Infrastructure** – Major/Minor applications layout details  
Sustainable Drainage

**Biodiversity Offsetting** – Planning system

**Agri-environment** – ELS & HLS (targeted delivery)

**Env Agency projects** – River Stour Pilot Area

**Voluntary** – Campaign for the Farmed Environment discovered a significant number of 'un-registered' ecological parcels

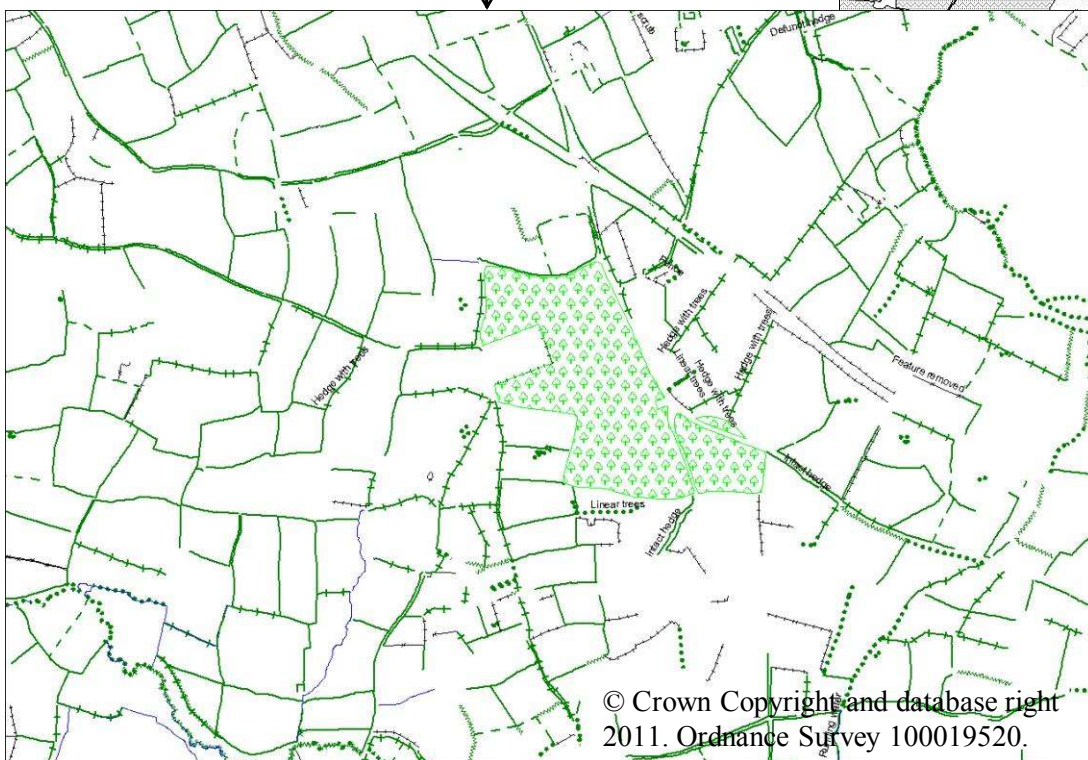
**Village Greens, Orchards, 'Quiet Areas'**

# Phase 1 Habitat Data

Phase 1 - Polygon



Phase 1 - Linear



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2011. Ordnance Survey 100019520.

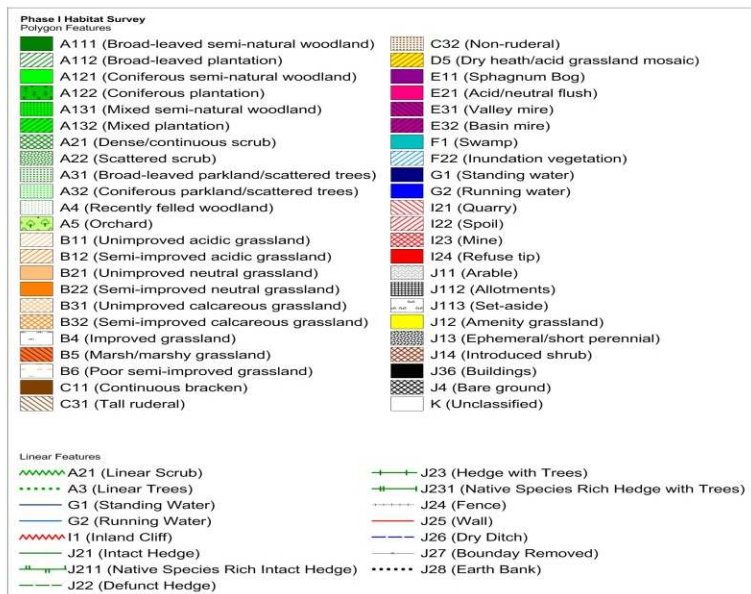
Accurate Data since 2001

20% resurveyed annually

Completely refreshed  
Dataset every 5 years



Habitat  
Biodiversity  
Audit





THE UNIVERSITY of York

$$S_i = \sum \exp(-\alpha d_{ij}) A_j$$

Woodland 1km (Linear not shown)

Distinctiveness

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Thanks for listening

David Lowe  
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Warwickshire County Council

On behalf of the  
Warwickshire, Coventry & Solihull (Pilot)

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