
Biodiversity and Development

*Legal, Tax, Data and Planning —
Practical Insights*



Agenda

- 01** Biodiversity & Development in Wales & England by Stephen Sykes, Capital Law
- 02** Biodiversity & Data by Simon Boyle, Landmark Information Group
- 03** BNG & Taxation by Stephen Poole, Poole & Co
- 04** Baseline for Biodiversity by David Hancock, Laisters Planning
- 05** Q&A



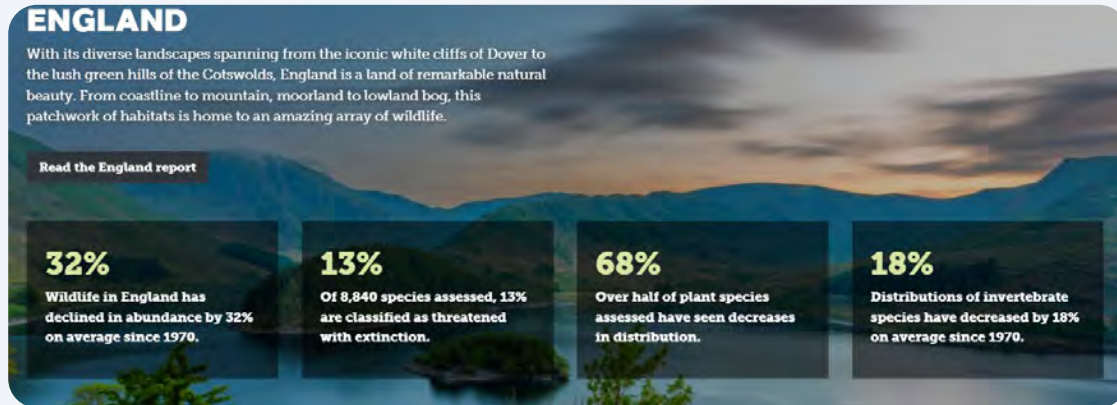
Biodiversity and Development in Wales & England

Stephen Sykes

Head of Climate, Environment and Sustainability



State of Nature Stats for England & Wales



Since 1970 UK species have declined by about 19% on average.

Nearly 1 in 6 species (16.1%) are now threatened with extinction

<https://stateofnature.org.uk/>

Very different approaches in England & Wales

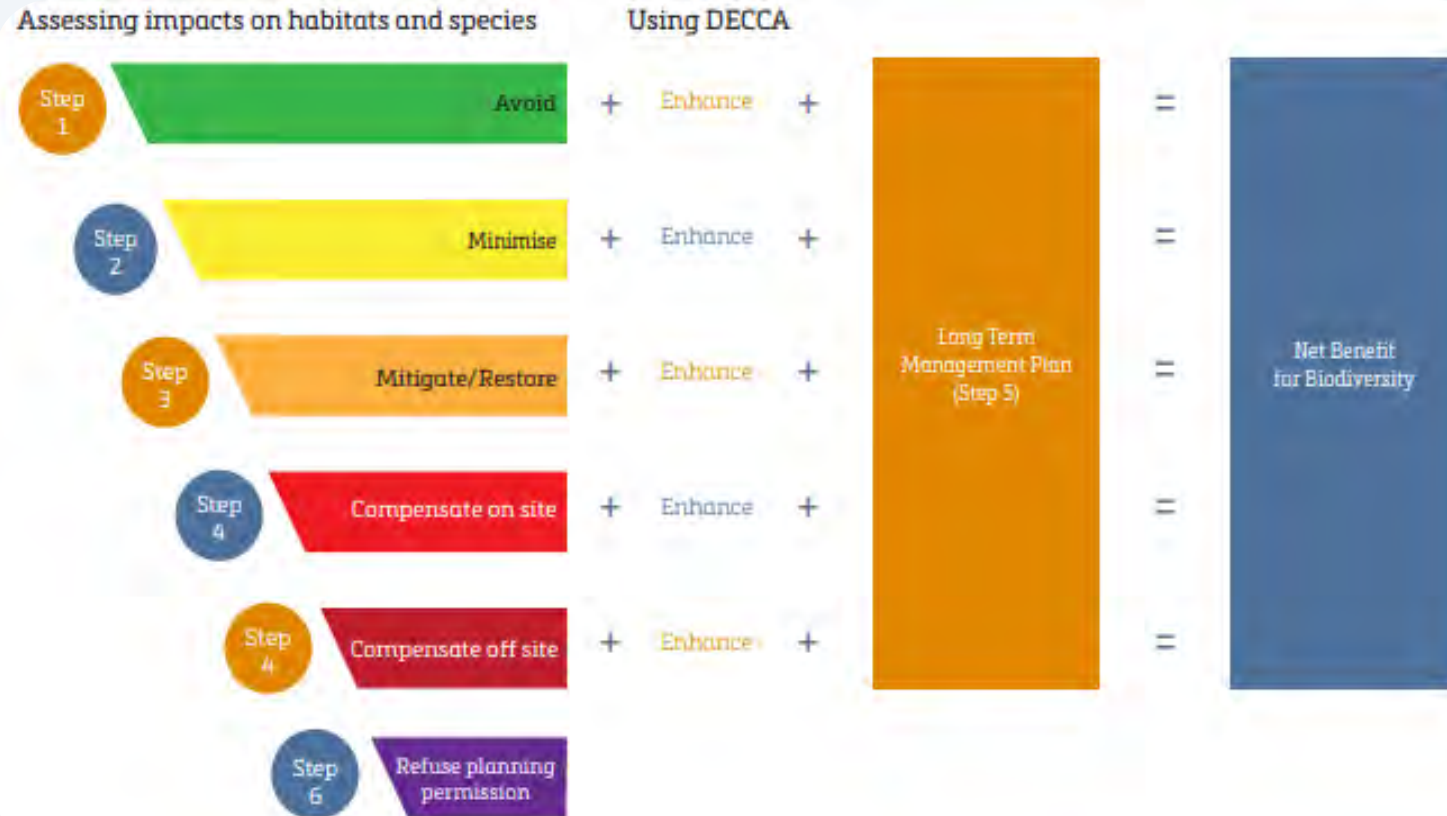
	England — BNG	Wales — NBB
Approach	<p>Quantitative — BNG Metric using Excel spreadsheet — minimum 10% improvement in biodiversity</p> <p>Market-driven — mandatory demand for BNG & mandatory planning condition for BNG</p> <p>Heavily regulated — 6 sets of supporting regulations</p>	<p>Qualitative — significant betterment</p> <p>No market for sale of BNG units or provision for BNG credits</p> <p>Flexible – too flexible?</p>
Off Site Solutions	<p>Improve off site land (could be miles away) or buy BNG Credits (expensive)</p>	<p>Improve neighbouring land only</p>

Biodiversity & Development in Wales — *Net Biodiversity Benefit*

- Development to leave biodiversity and resilience of ecosystems in a ***significantly better*** state than before
-through securing ***immediate and long-term, measurable and demonstrable benefit***
- ***primarily on or immediately adjacent to the site***
(PPW, 6.4.5)



Step-Wise Approach in Wales



Welsh planning authorities must follow a **step-wise approach** to.....deliver **net benefits**.....adverse environmental effects are: firstly ***avoided then minimised, mitigated, and as a last resort compensated for*** (PPW, 6.4.11)

The Cardiff Parkway Decision 30/1/2025

— *NBB in Practice*

- **Rumney and Peterstone SSSI lies alongside the Severn Estuary**
- Landscape is man made, reclaimed from sea over 2000 years
- Land below high mean water level sea
- Largest drainage system in Wales - system of shallow trenches draining into ditches
- 164 recorded species of insects and other invertebrates in the ditches



The Cardiff Parkway Decision 30/1/2025

— *NBB in Practice*

- First Minister **approves application** for planning for new station and business park
- Applies DECCA **step-wise** approach
- **On-site measures sufficient to mitigate and compensate for this loss**
- Plan to replace **3.9km** lost from development includes with **4.4km** of new ditches to (Note – **10%** increase in biodiversity)
- **“Wholly exceptional circumstances”** justify loss of 8% of SSSI and destroy the Marshfield Site of Importance for Nature Conservation



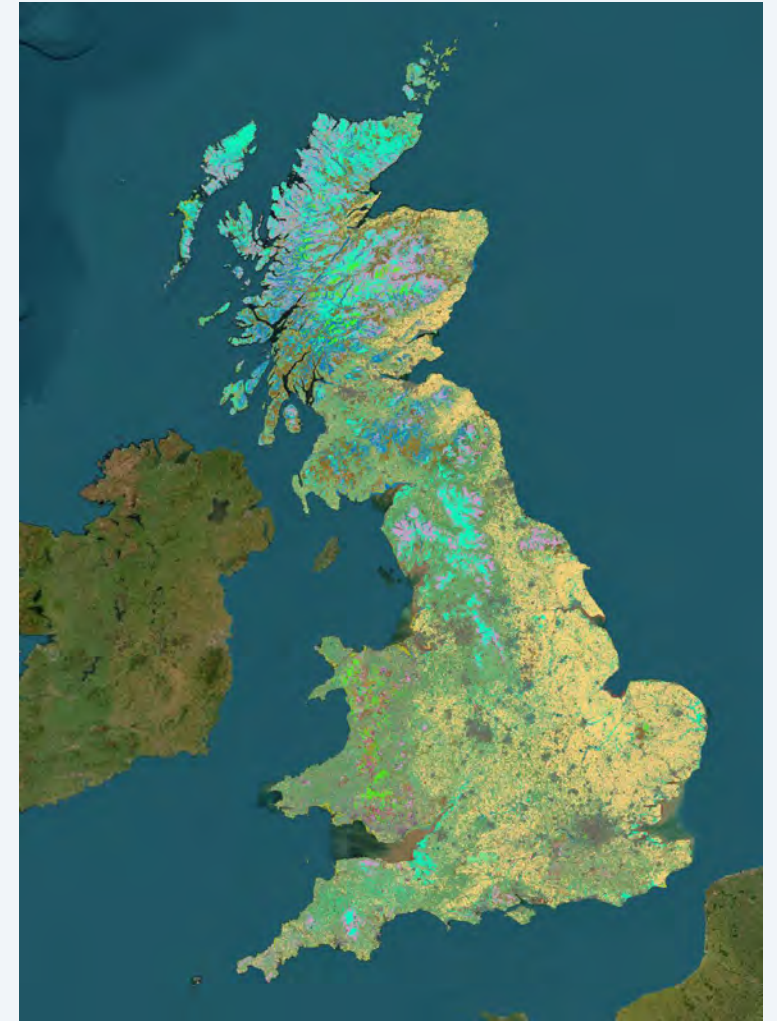
Biodiversity & Data

Simon Boyle
Landmark Information Group



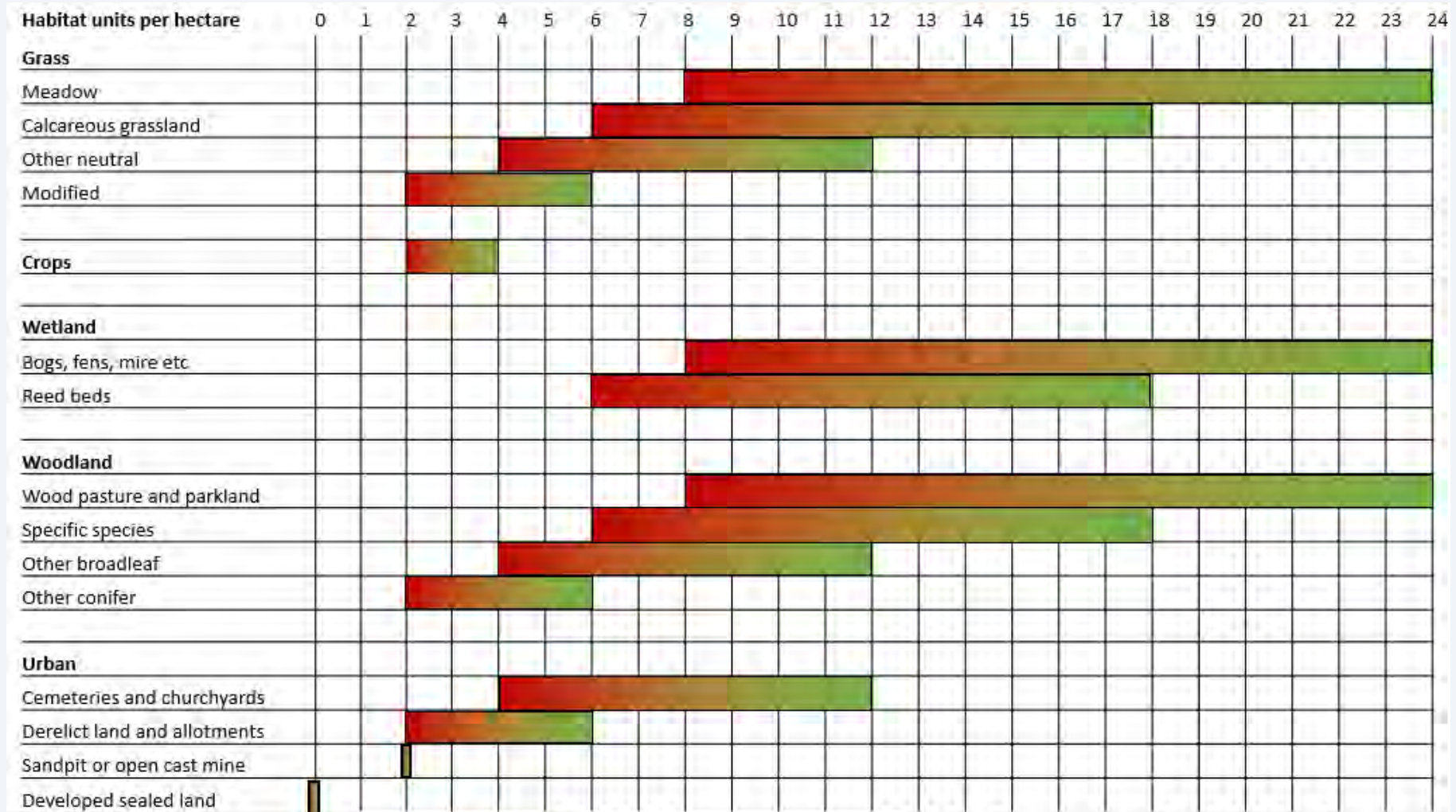
Natural systems are interconnected
— *need intelligent use of data*

Data is siloed



Map Impact Habitat Layer 2023

The importance of Condition.



Complexity of Condition.

- Condition scoring is relevant to each habitat category
- 3 high level categories (Good (3), Moderate (2), Poor (1))
- Used as a multiplier to inform the overall BNG score

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)
See UKHab

Condition Assessment Criteria		Condition Achieved (Y/N)
1	There must be 6-8 species per m ² . If a grassland has 9 or more species per m ² it should be classified as a medium distinctiveness grassland habitat type. NB - this criterion is essential for achieving moderate condition.	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	
4	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	
5	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	
6	Cover of bracken less than 20%.	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	
		Essential criterion 1 achieved (Y/N)
		Number of criteria passed
Condition Assessment Result	Condition Assessment Score	Score Achieved (%)
Passes 6 or 7 of 7 criteria including passing essential criterion 1	Good (3)	
Passes 4 or 5 of 7 criteria including passing essential criterion 1	Moderate (2)	
Passes 0, 1, 2 or 3 of 7 criteria; OR 4, 5 or 6 of criteria but failing criterion 1	Poor (1)	
Suggested enhancement interventions to improve condition score		

Maybe
Spectral index may infer species mix?

Maybe
Inferred using Sentinel-1?

Maybe
Spectral index may infer species mix?

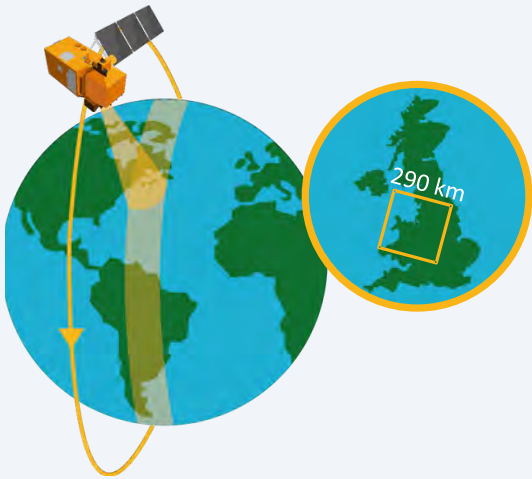
Difficult
Damage to grassland very challenging?

Maybe
% Value possible must be tested?

Maybe
Visible in satellite images seasonally?

Maybe
Spectral index may infer species mix?

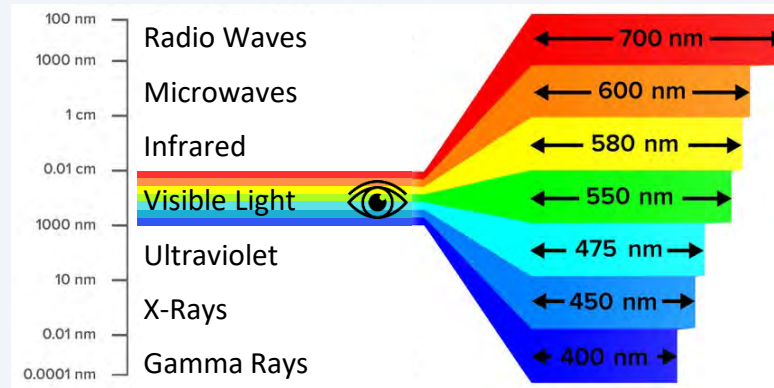
Satellite Tech Opportunity



Sentinel-2

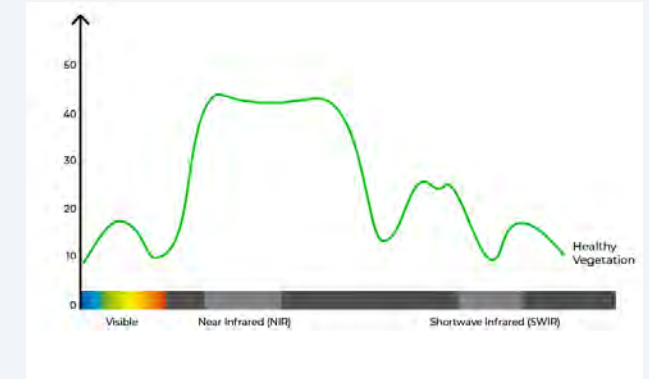
Worldwide, high-resolution, multi-spectral imagery

- 13 spectral bands
- 10 meters per pixel
- Every 5 days



Red and Near Infrared

Spectral properties are used to determine land use and various plant indices



Vegetation characteristics

Plant health and condition are measured with satellite indices, e.g. Normalized Difference Vegetation Index

Site Solutions Biodiversity Report

Sample Site

Report Prepared for: Sample Site
Report Reference: AEL-XXXX-CBH-XXXXXXX
Current use: Agricultural
Report Author: Tessie Hendry

Client Reference: Sample Site
Date: 13 November 2023
Proposed use: Development

ESTIMATED BIODIVERSITY
BASELINE UNITS

1597

Total units if existing habitats were improved to their maximum potential: **2454 (54% BNG opportunity)**



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Area habitats

HABITATS IDENTIFIED (see page 5)

Numerous habitats of varying condition were identified across the Site. Notable habitats include Wood Pasture and Parkland (very high distinctiveness) and various Deciduous Woodland (high distinctiveness) of moderate and good condition.

Linear habitats

HABITATS IDENTIFIED (see page 8)

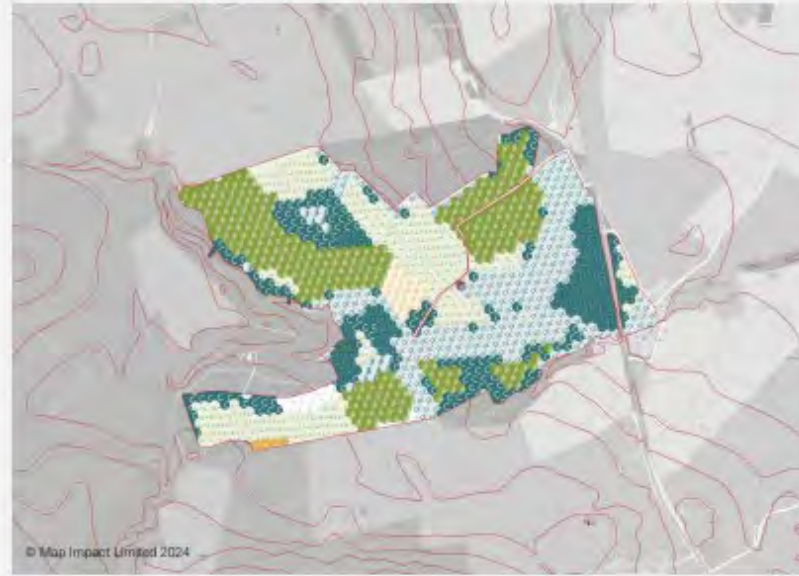
A review of recent aerial imagery indicates the presence of hedgerows on-Site. Ditches/drains and streams have been identified and measured on-Site.

Land based designations

DESIGNATIONS IDENTIFIED (see page 12)

Bewick And Beanley Moors Site of Special Scientific Interest 25m west, and Ancient Woodland has been identified on-Site.

Habitat



Bracken

(Distinctiveness 2/8)

Land with Bracken *Pteridium aquilinum* at >95% canopy cover at the height of the growing season.



Cropland

(Distinctiveness 4/8)

Regularly or recently cultivated agricultural, horticultural, and domestic habitats.



Lowland Mixed Deciduous Woodland

(Distinctiveness 6/8)

Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions, from very acidic to base-rich, occurs largely within enclosed landscapes, usually on sites with well-defined boundaries, at relatively low altitudes, although altitude is not a defining feature.



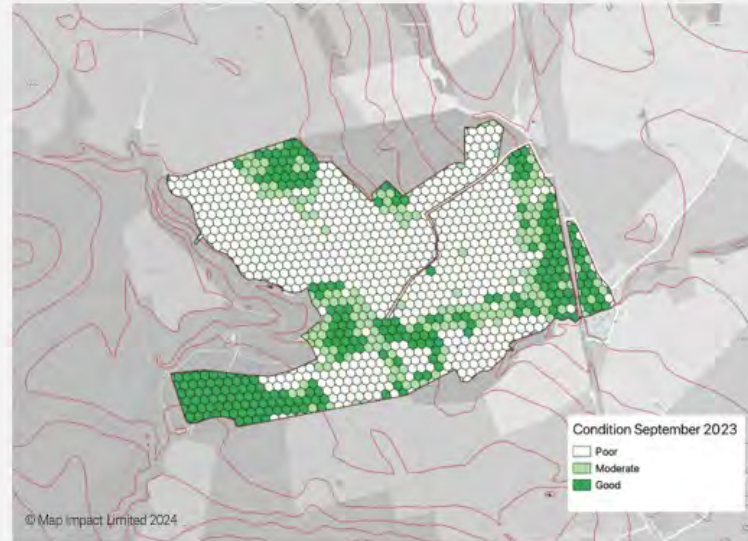
Coniferous woodland

(Distinctiveness 4/8)

Vegetation dominated by trees that are more than 5m high when mature, which forms a distinct, although sometimes open canopy which has a cover greater than 20%, with stand of both native and non-native coniferous tree species.



Condition



The condition score is based upon the quality and performance of a habitat, as indicated by measurements from a satellite, then benchmarked against equivalent habitats within the surrounding 10km.

The current score range is 1 to 3 to align with the DEFRA Biodiversity Metric Calculator, where condition scores (when applicable) are deemed 'poor', 'moderate' or 'good'.

Poor or Not Applicable	1
Moderate	2
Good	3

Baseline Summary

PUBLIC



Area Habitat - Baseline Summary



Illustrative habitat values

Habitat type	Area (ha)	Distinctiveness		Condition		Units	Confidence category
		Distinctiveness	Score	Condition	Score		
Bracken	4.30	Low	2	Condition Assessment N/A	1	8.60	Medium-High
Coniferous Woodland	1.29	Medium	4	Good	3	15.53	Medium
Coniferous Woodland	1.14	Medium	4	Moderate	2	9.14	Medium
Coniferous Woodland	0.55	Medium	4	Poor	1	2.21	Medium
Cropland	53.31	Medium	4*	Condition Assessment N/A	1**	213.24	Medium
Heathland	0.68	High	6	Good	3	12.31	Medium-High
Heathland	0.01	High	6	Moderate	2	0.11	Medium-High
Lowland Mixed Deciduous Woodland	10.77	High	6	Good	3	193.86	Medium
Lowland Mixed Deciduous Woodland	13.77	High	6	Moderate	2	165.29	Medium
Lowland Mixed Deciduous Woodland	21.31	High	6	Poor	1	127.84	Medium
Modified Grassland	14.77	Low	2	Good	3	88.64	Medium
Modified Grassland	5.67	Low	2	Moderate	2	22.66	Medium



Area Habitat - Baseline Summary

Habitat type	Area (ha)	Distinctiveness		Condition		Units	Confidence category
		Distinctiveness	Score	Condition	Score		
Other Grassland	0.38	Medium	4	Moderate	2	4.54	Medium
Other Grassland	10.38	Medium	4	Poor	1	124.61	Medium
Other Urban	0.18	Low	2	Good	3	1.11	Medium-High
Unknown	0.05	Low	2	Good	3	0.27	Medium
Wetland	0.18	Very High	8	Good	3	4.34	Medium
Wetland	0.15	Very High	8	Moderate	2	2.39	Medium
Wetland	2.29	Very High	8	Poor	1	18.31	Medium
Wood Pasture And Parkland	7.13	Very High	8	Good	3	171.07	Medium
Wood Pasture And Parkland	7.69	Very High	8	Moderate	2	123.11	Medium
Wood Pasture And Parkland	2.95	Very High	8	Poor	1	23.63	Medium

TOTAL ESTIMATED AREA HABITAT BASELINE UNITS: 1576

*As stated within the methodology section at the back of this report, available open-source data does not allow all habitats to be represented. As such, where specific habitat types are grouped under a broad habitat (i.e. the broad habitat 'cropland' comprises 10 specific habitat types), this is generally allocated the highest distinctiveness defined within that habitat group.

**Under the statutory biodiversity metric a condition score is not applicable to cropland, and the condition score attributed of 1 does not in any way reflect upon the quality of husbandry.

BNG Compliance ongoing monitoring

- May be annual
- Cost effective
- Objective
- Scalable
- Fast

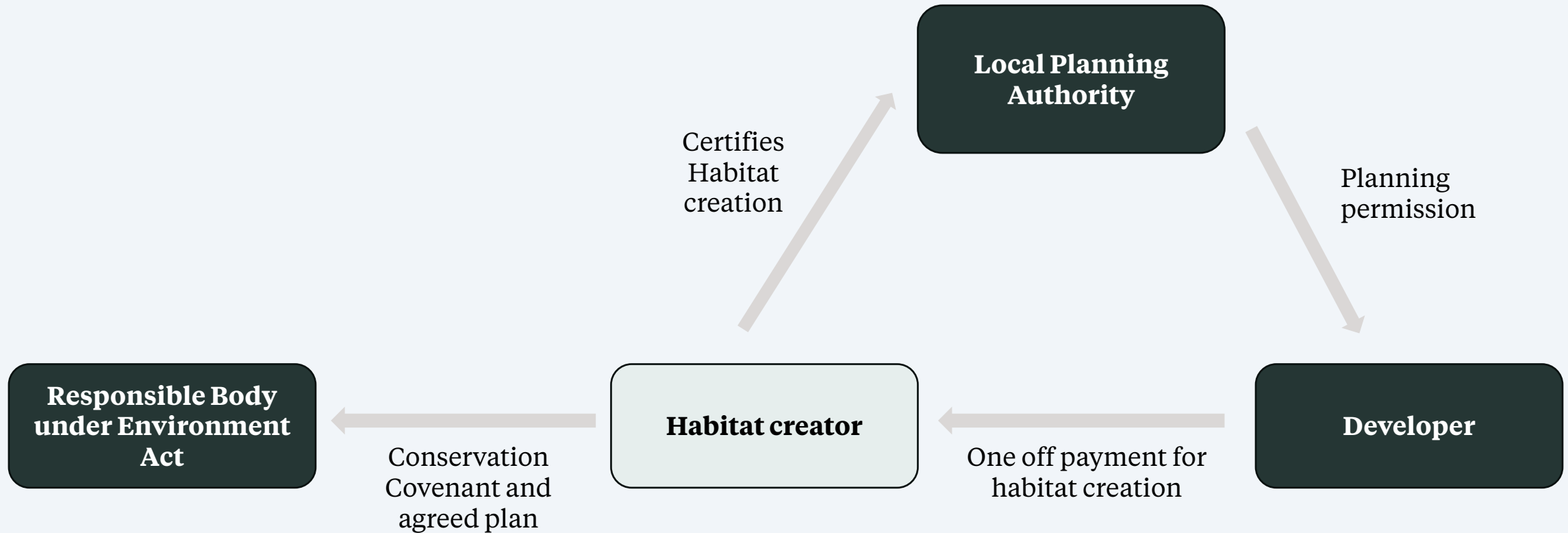
BNG & Taxation

Looking at the numbers

Stephen Poole
Poole & Co



Contract structure



Habitat types

- Area
- Linear
 - Hedgerow
 - Watercourse
- Distinctiveness 0 to 8
- Condition 1 to 3
- Range of units per ha 0 to 24

Area habitat examples

Habitat	Distinctiveness score	Units/ha From	Units/ha To
Lowland meadow	8	8	24
Modified grassland	2	2	6
Crops	2 or 4	Condition not applicable	
Cemeteries and churchyards	4	4	12
Sealed surface	0	0	0

Creation and enhancement multipliers

	From	To
Difficulty	0.1	1.0
Time to target	0.3	1.0
Spatial risk	0.5	1.0
Strategic significance	1.0	1.15

Example

The gross payment

Units per ha after multipliers

7

Price per unit

£25k

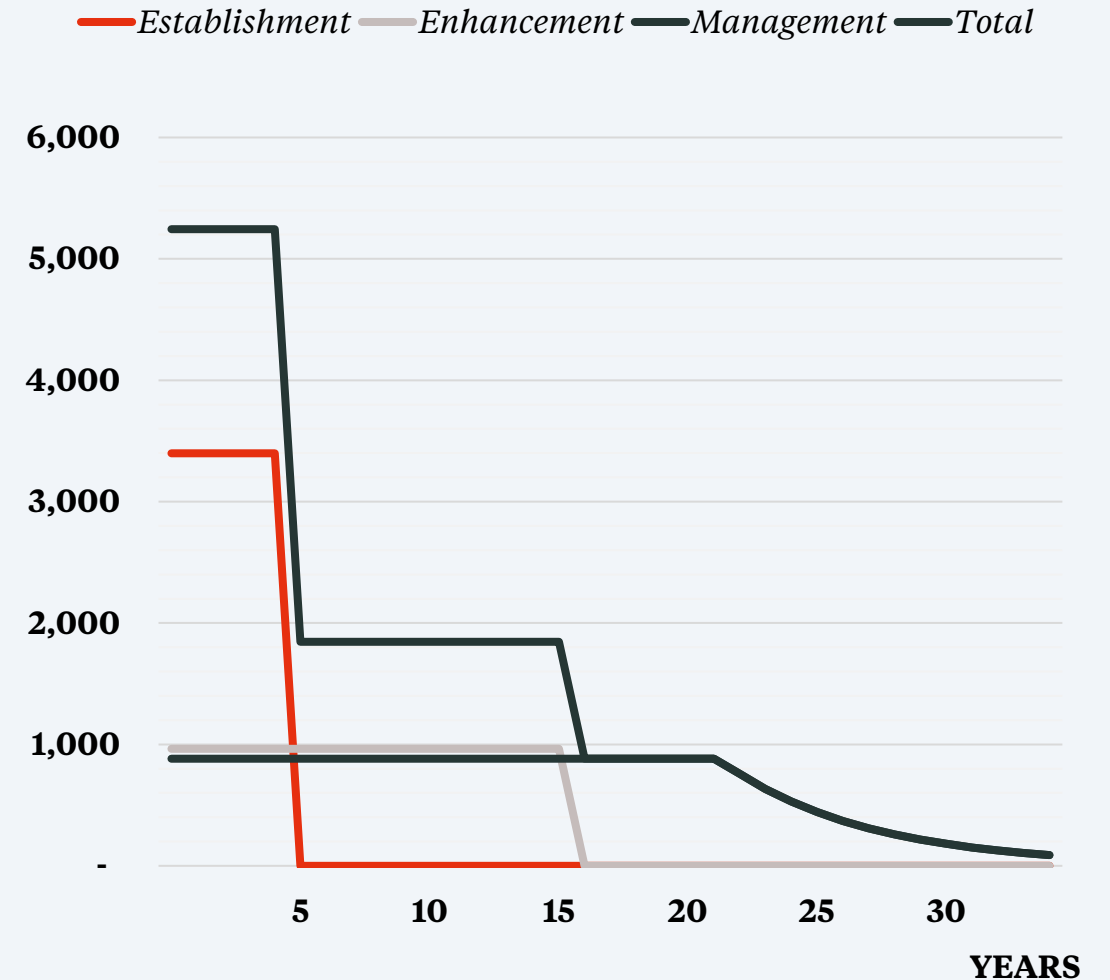
Total per ha

£175k



Example — *direct costs*

- 20% to 30% total receipt
- Front loaded
- Escrow or trust arrangement
- Insurance based solutions



Example — *gross profit*

Unites per ha after multipliers	7
Price per unit	£25k
Total per ha	£175k
Costs — say	£60k
Gross profit	£115k
Over 30 years (ignoring inflation)	£4k
Farming	£1k to £4k
Energy plants	£50k+



Covenant, Stacking and Taxation

Covenant

No inconsistent activity

On failure to produce units or destruction of units:

- Purchase of units from the marketplace
- Not if:
 - HMMP complied with
 - Force Majeure
 - Compulsory purchase

HMMP changes

- Climate change
- Build in resilience
 - A variety of habitats
 - Mixed with other income sources

Stacking

Does not play well with:

- Countryside Stewardship
- Sustainable Farm Incentives
- Carbon codes
 - Peatland
 - Woodland
- Most woodland grants

Does play well with:

- Modest amounts of specialist grazing
- Eco tourism
- Grants for public access

Taxation

VAT standard rate

Developer :

- Can usually recover VAT
- Cost of development

Receipt of offset payment

- HMRC consultation
- Income or capital gain
- Costs
- Woodland exemption
- Structuring thoughts

IHT

- APR changes from 6 April 2025
- Mysterious omission of BPR from consultation
- Budget 2024 mayhem

Disclaimer

The whole area of taxation of BNG is under review and has many uncertainties. No reliance should be placed on anything said in this presentation without taking expert accounting, taxation and legal advice.



Baselining for Biodiversity

David Hancock
Laister Planning



Case Study of Habitat Clearance

- It is early 2024
- Client not aware of his obligations
- Owns land that benefits from a historic planning permission
- Clears land which is a residential garden
- Engages the Council in a pre-application enquiry and BNG pre-application service regarding the development of 3x new dwellings

Background and Outlook

- Some 8 acres of careful clearance taken place
- Considerable woodland loss
- Removal of residential woodland is penalised, planting residential woodland not rewarded on the BNG metric
- Hypothetically, the removal of 5 trees and replacement of 5,000 still counted as a significant loss



Reality

- Total loss in the region of -19.66 habitat units, and -42.77%.
- Council flatly and correctly repeat need for 10% gain on pre-clearance data, citing appropriate legislation
- Site left with a ploughed surface, no much hope of demonstrating a 10% net gain on site, and significant cost for purchasing the required units.
- We needed legal advice.



A Little Law

TCPA 1990 Schedule 7A

- Measurement of existing and proposed biodiversity is of the ‘onsite habitat’
- The ‘onsite habitat’ means habitat on the land to which the planning permission relates
- An LPA must only be satisfied that the post-development value of the onsite habitat has increased by at least 10% compared to the pre-development onsite habitat (paragraph 15, schedule 7A).

Biodiversity Gain Requirements (Exemptions) Regulations 2024

Regulation 8: The BNG Condition does not apply to “self-build and custom build”. These:

- consist of no more than 9 dwellings;
- are carried out on a site which has an area no larger than 0.5 hectares; and
- consists exclusively of dwellings which are self-build or custom housebuilding.

Section 1(A1) of the Self-build and Custom Housebuilding Act 2015 Act defines “self-build and custom build” housebuilding as the building or completion by (a) individuals, (b) associations of individuals, or (c) persons working with or for individuals or associations of individuals of houses to be occupied as homes by those individuals.

Options

- Existing situation was pure harm — which benefits nobody.
- Solutions include:
- Application for 3x dwellings with a very careful red line, covering only very poor-quality pre-clearance ground such as tennis courts and hardstandings
 - Consider exemptions, such as self-custom build planning applications
 - Enhance the dwelling through permitted development rights and then sell the site

Actions and Key Learnings

- We carefully drew a red line boundary around approximately 0.49 hectares for three dwellings and access, as a self-build planning proposal. BNG is not required at all.
- We could have drawn a red line boundary around the existing hardstanding and former grassland and delivered 10% BNG on that very small baseline, rather than the whole site.
- The remaining land will be landscaped by a professional landscaping and gardening team. The property has been extended and reconfigured through permitted development rights and lawful development certificates. No BNG has been required at all.
- If there had been flexibility, the applicant would have engaged and a BNG compliant scheme could have been put forward. The LPA would have control over that, and there would have been landscaping and ecology conditions for the whole area.

Thank you
Any questions?



Contact us:



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