Developing UK indicators for the Strategic Plan for Biodiversity 2011-2020. (Defra contract 1301)

Supporting information for the survey on indicators and data sets demonstrating awareness of biodiversity conservation.

This project is considering options for developing a UK indicator to track change in public **awareness of biodiversity conservation**. Availability of suitable datasets is a significant constraint on possible options.

The review and synthesis of metadata used in the UK National Ecosystem Assessment (UK NEA, 2011a,b) identified data sets that might be used in relation to public awareness, which are listed in **Table 1** (the full suite of data sets identified can be accessed here.

Using the metadata synthesis as a starting point, we are keen to identify any additional existing data sets or indicators of public awareness, such as the 'EuroBarometer' (a public opinion survey carried out by the EC) and the 'Biodiversity Barometer' (an indicator produced annually by the Union for Ethical Biotrade).

Please consider the criteria that will be used for quality testing indicator options (**Annex 1**) when listing any indicators or data sets that you think may be suitable.

The information that you provide will be used in an expert workshop, which will: review and rank all datasets identified against the criteria for quality testing indicator options; consider the pros and cons of different types of indicators and rank them against the criteria for quality testing data and indicator options; and identify a maximum of three possible options for developing an indicator of ecosystem service indicators at both the UK and country-level (i.e. England, Scotland, Northern Ireland, Wales).

References:

UK NEA (UK National Ecosystem Assessment) (2011a). The UK National Ecosystem Assessment: synthesis of the key findings. UNEP-WCMC, Cambridge. [Online]. Available at: http://uknea.unepwcmc.org/Resources/tabid/82/Default.aspx.

UK NEA (UK National Ecosystem Assessment) (2011b). The UK National Ecosystem Assessment: technical report. UNEP-WCMC, Cambridge. [Online]. Available at: http://uknea.unepwcmc.org/Resources/tabid/82/Default.aspx.

Table 1: Data sets identified in the scoping study that might be used in relation to developing an indicator of awareness of biodiversity conservation

	Data Description	Ecological System			Temporal Coverage					Spatial Coverage					Data Quality and Accessibility			Relevance to Biodiversity Options Papers							Relevance to CBD Strategic Goals & Aichi Targets					Data Quality
Data Set ID No.		Freshwater	Marine	Terrestrial	First Data Point	Most Recent Data Point	Data Collection ongoing?	Sampling Frequency	Time Series	England	Scotland	Wales	Northern Ireland	Can Be Disaggregated	Transparency	Method	Fees	Options P1.: Awareness	Options P2: ES	Options P3: HC	Options P4: PGR	Options P5: CC	Options P6: Business	Most Relevant Ecosystem Service	SG A : Mainstreaming	SG B :Pressures	SG C : Status	SG D: Benefits	SG E : Implementation	Subjective Quality Score
9	Area of fully and in-conversion organic land areas			✓	2002	2008	✓	□	◘	✓	✓	✓	✓	■	◘	■	□	✓	✓					P	4	7				◘
418	Designated woodland habitats in Northern Ireland (ASSIs, SACs)			✓				■	□				✓	□	■	U	□	✓	✓					C		5				□
395	Leisure activities in Great Britain	✓	✓	✓	1994	2003	✖	▣	◘	✓	✓	✓		■	■	◘	□	✓					✓	C	1					◘
396	Leisure activities in England	✓	✓	✓	2005	2005	✖	▣	□	✓				□	■	◘	□	✓					✓	C	1					◘
397	Monitor Engagement with the Natural Environment (MENE) survey	✓	✓	✓	2009	2012	✓	▣	◘	✓				□	■	◘	□	✓					✓	C	1					◘

222	Mapping greenspace accessibility in Edinburgh			✓	2007	2007	✖	▣	☐		✓			☐	■	◘	☐	✓						**C**	**1**					◘
236	Visitor spend at sea bird RSPB reserves around the UK		✓	✓	2009	2009	✓	☐	☐	✓	✓	✓	✓	■	■	■	◘	☐	✓						**C**	**1**					☐
28	Volume of bottled water consumed in the UK	✓			1976	2010	✓	☐	■	✓	✓	✓	✓	☐	◘	☐	☐	✓							**P**	**1**			**14**		☐
104	Visitor use of mountain, moorlands & heath-dominated areas			✓	1974	2002	✓	☐	■	✓	✓			☐	■	◘	☐	✓							**C**	**1**			**14**		☐
215	Density of new dwellings built on previously developed land England			✓	1989	2010	✓	▣	■	✓				☐	◘	◘	☐	✓								**1**	**5**				◘
255	The importance and frequency of use of greenspace in England			✓	2009	2009	✓	☐	☐	✓				☐	**U**	◘	☐	✓							**C**	**1**			**14**		☐

258	Trips per person per year by transport mode in Great Britain			✓	1989	2006	✓	□	■	✓	✓	✓		□	◘	◘	□	✓						**C**	**1**					□
259	Distance travelled per person per year in GB by trip purpose			✓	1985	2006	✓	□	■	✓	✓	✓		□	◘	◘	□	✓						**C**	**1**					□
260	Sports participation at least once a week	✓	✓	✓	2007	2011	✓	□	□	✓				□	◘	◘	□	✓						**C**	**1**			**14**		◘
261	Reasons for participation in Learning through Landscapes program			✓	2003	2003	✖	■	□	✓				□	■	◘	□	✓						**C**	**1**			**14**		□
314	Welsh Outdoor Recreation Survey	✓	✓	✓	2008	2009	✖	□	□			✓		□	■	◘	□	✓						**C**	**1**			**14**		□
314a	Visual and sensory evaluation of Wales	✓		✓		2003	✓	■	□			✓		□	◘	◘	□	✓						**C**	**1**			**14**		◘
426	Estimated resource value of the open space areas			✓	2005	2005	✖	■	□				✓	□	■	**U**	□	✓						**C**	**1**			**14**		□
446	Tourism in Northern Ireland from 1959-2009 (visits and revenue)	✓		✓	1959	2009	✓	□	◘				✓	□	◘	◘	□	✓						**C**	**1**			**14**		◘

Annex 1. Criteria for quality testing indicator options for the Strategic Plan for Biodiversity 2011-2020. These criteria build upon those in the Defra specification for WC1031 (Developing UK indicators for the Strategic Plan for Biodiversity 2011-2020) with reference to the Convention on Biological Diversity (CBD)[1], Streamlining European Biodiversity Indicators (SEBI)[2], Biodiversity Indicator Partnership (BIP)[3] criteria.

	Criteria	Levels	Options		
			A	B	C
Data issues	1. Transparency and auditability	1. Data unavailable to public			
		2. Limited summary data available			
		3. Full raw/primary data set and metadata available			
	2. Verification	1. Unverified data			
		2. Limited verification checks in place			
		3. Detailed verification in place and documented			
	3. Frequency of updates	1. Sporadic			
		2. Every 3-5 years			
		3. Annual or biennial			
	4. Security	1. Future data collection discontinued			
		2. Future data collection uncertain			
		3. Future data collection secure			
	5. Spatial coverage	1. Partial UK coverage			
		2. UK coverage, some bias			
		3. Full UK coverage, including adjacent marine areas, if and where appropriate			
	6. Temporal coverage	1. Insufficient data for assessment (<5 years)			
		2. Sufficient data to assess progress (5-10 years)			
		3. Long (10+ years) and short-term trends can be assessed			
	7. Capacity for disaggregation	1. Cannot be disaggregated			
		2. Can be disaggregated but data quality and assessment issues arise			
		3. Can be disaggregated to Country level and assessed			
Methodology	8. Transparency and soundness	1. Methodology not available			
		2. Methodology available but not peer reviewed			
		3. Methodology published and peer reviewed			
	9. Precision	1. Unknown precision or precision quantifiable but unable to statistically assess trends			
		2. Uncertainty quantifiable and signal-to-noise ratio allows for statistical assessment of trends			
		3. Uncertainty quantifiable and signal-to-noise ratio allows for year-on-year statistical assessments			
Indicator characteristics	10. Policy relevance: progress towards Biodiversity 2020 targets (CBD, EU, UK, country)	1. No clear relationship with 2020 targets			
		2. Relates indirectly to progress towards 2020 targets			
		3. Relates directly to progress towards 2020 targets			
	11. Biodiversity relevant	1. Indicator is a proxy for biodiversity change			
		2. Indicator directly addresses biodiversity and relates indirectly to state, pressures, benefits and/or responses			
		3. Indicator directly addresses biodiversity and relates directly to state, pressures, benefits and/or responses			
	12. Cause-effect relationship	1. Unknown relationship between indicator and issue of concern			
		2. Accepted theory of relationship between indicator and issue of concern			
		3. Quantifiable relationship between indicator and issue of concern			

[1] UNEP/CBD/SBSTTA/9/10 (2003). Monitoring and indicators: designing national-level monitoring programmes and indicators. UN Environment Programme. http://www.cbd.int/doc/meetings/sbstta/sbstta-09/official/sbstta-09-10-en.pdf

[2] EEA (2007). Halting the loss of biodiversity by 2010: proposal for a first set of indicators to monitor progress in Europe. EEA Technical report No 11/2007. http://www.eea.europa.eu/publications/technical_report_2007_11

[3] 2010 Biodiversity Indicators Partnership (2010). Guidance for national biodiversity indicator development and use. UNEP World Conservation Monitoring Centre. http://www.bipnational.net/

	13. Sensitive to change	1. Indicator does not detect changes in systems within timeframes and spatial scales that are relevant to decision-making			
		2. Indicator detects changes in systems only within timeframes or only on spatial scales that are relevant to decision-making			
		3. Indicator detects changes in systems within timeframes and spatial scales that are relevant to decision-making			
	14. Human-induced vs. natural changes	1. Indicator cannot discriminate between human-induced and natural changes			
		2. Indicator potentially discriminates between human-induced and natural changes			
		3. Indicator clearly discriminates between human-induced and natural changes			
	15. Communication	1. Indicator is complex, difficult to communicate and not accepted by all major stakeholders			
		2. Indicator is complex and difficult to communicate but accepted by all major stakeholders			
		3. Indicator is simple, easy to communicate and accepted by all major stakeholders			
		Sub-score: Data issues			
		Sub-score: Methodology			
		Sub-score: Indicator characteristics			