

LANDMAP - Implementing the Landscape Monitoring Amendments

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1. Introduction

LANDMAP is a complete all-Wales GIS based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set.

LANDMAP comprises five spatially related datasets known as the Geological Landscape, Landscape Habitats, Landscape Habitats, the Historic Landscape and the Cultural Landscape, each approach is detailed in the LANDMAP methodology chapters. The five spatial layers are divided up into discrete geographical units (polygons in GIS) referred to as Aspect Areas. Each mapped Aspect Area is distinctly defined by its recognisable landscape characteristics and qualities.

LANDMAP has been in place in Wales since 1997. The current LANDMAP benchmark methodology was introduced in 2003 and updated in 2008 and 2013. In order to maintain the effectiveness and confidence in LANDMAP as the key landscape information resource the mapping and survey information must be updated. A robust, repeatable and standardised monitoring methodology has been developed (LANDMAP Methodology: Guidance for Wales, Monitoring LANDMAP, 2013) to identify areas where change has occurred, this is interpreted in the context of landscape change relevant to the five LANDMAP layers. The whole process is underpinned by a bespoke quality assurance process.

During 2014-15 the LANDMAP programme of monitoring identified Landscape Habitats Aspect Areas where significant landscape change had been identified between 2001/3 and 2013/4. This work was based upon the interpretation and analysis of a variety of resources, including as the key source, the LANDMAP change detection packs (CDP). In addition, information supplied by local authorities plus supplementary information (e.g. forest restocking, windfarm maps) were used. This work identified exactly which Aspect Areas should be amended and in what way. Eight hundred and eighty Aspect Areas were identified which required some form of amendment with up to a further 266 which needed an element of evaluation review. This study implemented these changes in the newly redesigned LANDMAP portal. This report details the process of implementation of these changes.

2. Task 1 – Evaluation Methodology

To create a wide-scale update of LANDMAP Landscape Habitats it was necessary to review the Aspect Areas that consisted of over 30% managed for conservation but not previously evaluated as "Outstanding" under the existing method. In total 266 Aspect Areas required evaluation as shown in Table 1.

Table 1: Number of Aspect Areas changed per Monitoring Area

Monitoring area and associated authorities	Approx. number of aspect areas to review evaluation
Area 1 Caerphilly, Bridgend, Rhondda Cynon Taff, Blaenau Gwent, Merthyr Tydfil, Torfaen are excluded as they were completed in 2013	0
Area 2 Monmouthshire Cardiff, VoG, Newport	38
Area 3 Carmarthenshire, Swansea, NPT	51
Area 4 Pembrokeshire & Pembrokeshire Coast National Park, Ceredigion	60
Area 5 Powys (including Brecon Beacons National Park within Brecknockshire)	14
Area 6 Wrexham, Denbighshire, Flintshire	9
Area 7 Conwy, Gwynedd, Snowdonia National Park	42
Area 8 Ynys Mon	52
Minimum number of aspect areas to be updated under this contract	266

Prior to the start of the evaluation process an evaluation methodology was prepared and agreed with Natural Resources Wales. A copy of the methodology is provided in Appendix A.

Of the Aspect Areas for evaluation seven were considered to have had a distinct change as shown in Table 2.

Table 2: Aspect Areas with distinct changes

Aspect Areas	Change	Reason
MNMTHLH029	Change from high to outstanding	Change from high to outstanding for quality of woodland habitat
PMBRKLH348	Change from high to outstanding	Change from unassessed to low for management of scrub encroachment.
PMBRKLH359	Change from high to outstanding	Change from moderate to high due to coastline being continuous and largely unaltered and rocky shore biodiversity as indicated by SSSI citation.
PMBRKLH376	Change from high to outstanding	Change from moderate to high due to coastline being continuous and largely unaltered and marine biodiversity and presence of nationally scarce species as indicated in SSSI citation.
SNPLH393	Change from high to moderate	Change from high to moderate due to high extent of improved grassland and bracken, and poor connectivity of core habitats within aspect area.
SWNSLH479	Change from high to moderate based on overall evaluation	Change from low to high for continuous intertidal habitat
YNSMNLH063	Change from high to outstanding	Change from high to outstanding based on conditions provided by shelter from wave action

3. Task 2 - LANDMAP Portal Training

To make the recommended amendments in the 2014 Change Detection Packs a short training period was completed to ensure all staff resources were upskilled to use the new LANDMAP Portal. Four members of Environment Systems staff were trained to use the LANDMAP Portal.

The advantage of using the portal is that all change surveys are directly amended in the main LANDMAP SQL database without any downloading or uploading. Therefore, all changes to surveys were made direct to the central SQL database resulting in immediate update.

During the course of the updating period several technical issues with website certification and creating a secure portal were experienced. Although this was often temporary (approximately 1-2 hours), on a number of occasions it resulted in the loss of half a day of the updating period. This is a relatively minor issue and probably related to updating the database infrastructure at the same time as updating the technical Landscape Habitats information.

It was agreed at the LANDMAP Portal training session that a number of the questions could be bulk updated by the database manager. These included:

Question 1 Date of Monitoring

• To be set as single date or date range in the period February to March 2016.

Question 1a Monitoring Undertaken by

• To be set to Environment Systems

4. Updating Aspect Areas using the Portal

4.1. Required LANDMAP Portal Updates

During the Change Detection Packs 2014 project to identify the recommendations for update to LANDMAP Landscape Habitats a total of 880 Aspect Areas were confirmed as across the 8 national areas as illustrated in Table 3.

Table 3: Number of Aspect Areas to be Updated

Monitoring area and associated authorities (Approximate number of aspect areas to update in brackets)	Approx. number of aspect areas to update per area		
Area 1 Caerphilly, Bridgend, Rhondda Cynon Taff, Blaenau Gwent, Merthyr Tydfil, Torfaen are excluded as they were completed in 2013	N/A		
Area 2 Monmouthshire Cardiff, VoG, Newport	60		
Area 3 Carmarthenshire, Swansea, NPT	135		
Area 4 Pembrokeshire & Pembrokeshire Coast National Park, Ceredigion	86		
Area 5 Powys (including Brecon Beacons National Park within Brecknockshire)	133		
Area 6 Wrexham, Denbighshire, Flintshire	57		
Area 7 Conwy, Gwynedd, Snowdonia National Park	370		
Area 8 Ynys Mon	39		
Minimum number of aspect areas to be updated under this contract	880		

Of the Aspect Areas for update all were completed for Areas 2-7 and Area 8 (510). Undertaking the evaluation as defined in Task 1, a further 266 Aspect Areas were also updated. Furthermore, an additional 36 Aspect Areas were created during Task 4 (Update of GIS Boundaries, see next Chapter 5) and subsequently updated via the LANDMAP Portal.

5. Aspect Area Boundary updates using GIS

Using most up to date version of LANDMAP Landscape Habitats dataset (downloaded from http://lle.wales.gov.uk/Catalogue?lang=en&text=landmap) the Aspect Area amendments were made using ESRI ArcGIS 10 and classification level 1-3 detailed. Projections and bounds were confirmed as ESPG 27790 (OSGB 1937 / British National Grid) and any slivers removed to ensure a seamless polygon dataset. A copy of the updated datasets was delivered to National Resources Wales during the course of the project.

5.1. New Aspect Areas

Of the boundary changes made 36 new Aspect Areas were created as follows: When completing the information for these areas it became apparent that without the Local Wildlife Site (e.g. SNCI) data it would not be possible to accurately complete all the questions, this will affect all those aspect areas with wither a low or moderate evaluation as those valued high or outstanding will already have enough national or international designations to ensure the value is correct. However the presence of Local Wildlife Sites could be enough to change an areas from a low to a moderate designation and these areas will need additional checking to finalise this factor.

Table 4: New Aspect Areas Added

Aspect Area UID Aspect Area Region		Region	Class 1	Class 2	Class 3
Areas 3 and 4	•				
The second secon		Costal & Marine Habitats	Coastland	Intertidal	
NPTLH110	Aberavon sands	NeathPortTalbot	Costal & Marine Habitats	Coastland	Intertidal
NPTLH111	Beach west of River Neath	NeathPortTalbot	Costal & Marine Habitats	Coastland	Intertidal
PMBRKLH002	Ramsey Island - Coast	Pembrokeshire			
Area 5					
BRCKNLH008	Mynydd Eppynt south	Brecknockshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Mosaic
BRCKNLH009	River Wye floodplain	Brecknockshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
BRCKNLH010	Usk River floodplain	Brecknockshire	Dry (Relatively)	Grassland and Marsh	Improved Grassland

			terrestrial habitats		
BRCKNLH011	Usk Valley south	Brecknockshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
BRCKNLH012	Usk Valley west	Brecknockshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
BRCKNLH013	Talybont Valley	Brecknockshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
RDNRLH061	Knighton	Radnorshire	Dry (Relatively) terrestrial habitats	Mosaic	Mosaic
RDNRLH062	Presteigne	Radnorshire	Dry (Relatively) terrestrial habitats	Built up areas	Residential/Green Space
RDNRLH063	Rhayader	Radnorshire	Dry (Relatively) terrestrial habitats	Built up areas	Residential/Green Space
Area 6				•	
DNBGHLH104	Llanystumdwy	Denbighshire	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Mosaic
GWNDDLH007	Aberdaron	Gwynedd	Dry (Relatively) terrestrial habitats	Mosaic	Mosaic
GWNDDLH008	Afon Saint Stream	Gwynedd	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Mosaic
GWNDDLH009	Foel Ddu and Coed Garn Fadryn Wood	Gwynedd	Dry (Relatively) terrestrial habitats	Woodland and Scrub	Coniferous Woodland.
SNPLH011	Llyons Pendyffryn	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Mosaic	Mosaic
SNPLH014	Llechwedd	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland

SNPLH016	Llanbedr-y- cennin west	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Mosaic
SNPLH032	Llwynion fechan	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
SNPLH085	Bwlch y Bedol	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Mosaic
SNPLH119	Tyn-y-fron	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Mosaic	Mosiac
SNPLH145	Llyn Gwernan	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Woodland and Scrub	Mixed Woodland
SNPLH148	Tal y Waen	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Mosaic	Mosaic
SNPLH207	Foel Crochan	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Mosaic	Mosaic
SNPLH219	Dyfi National Nature Reserve	Snowdonia National Park	Coastal and Marine Habitats	Coastland	Intertidal (incl. muds/sands, saltmarsh, shingle/gravel and boulders/rock.
SNPLH231	Cefn Coch	Snowdonia National Park	Dry (Relatively) terrestrial habitats	Grassland and Marsh	Improved Grassland
SNPLH268	Barmouth Bay	Snowdonia National Park	Coastal and Marine Habitats	Coastland	Intertidal (incl. muds/sands, saltmarsh, shingle/gravel and boulders/rock.
Area 8					
YNSMNLH145	Llyn Traffwll Reservoir South	Anglesey	Dry (Relatively) terrestrial habitat	Grassland and Marsh	Mosaic
GWNDDLH001	Black Rock Sands	Gwynedd	Costal & Marine Habitats	Coastland	Intertidal
GWNDDLH002	Morfa Dinelle	Gwynedd	Costal &	Coastland	Sand dune

			Marine Habitats		
GWNDDLH003	Abergwyngregyn	Gwynedd	Dry (Relatively) Terrestrial Habitats	Grassland & Marsh	Improved Grassland
GWNDDLH004	Penmaenmawr sands west	Gwynedd	Costal & Marine Habitats	Coastland	Intertidal
GWNDDLH005	Plas-uchaf Farm	Gwynedd	Dry (Relatively) Terrestrial Habitats	Grassland & Marsh	Improved Grassland
GWNDDLH006	Llwyn-hudol	Gwynedd	Dry (Relatively) Terrestrial Habitats	Mosaic	Mosaic

Where changes in boundaries have been made Question 12 (the amount of land which is under designation) needs updating based on these new boundary features. Unfortunately the project did not have the datasets for the Local Wildlife Sites (e.g. SNCI) available for each local area. It was therefore not possible to tell if the area change would result in the evaluation having to change for those areas where the Local Sites might make a difference. These were deemed to be the Aspect Areas with a boundary change which were evaluated as Low or Moderate. Aspect Areas evaluated high or outstanding are judged mainly on the presence of nationally significant (SSSI's) or internationally significant SAC's plus the networks. The Aspect Areas affected by this are shown in Table 5 and should be further investigated when this data becomes available.

Table 5: Boundary Change Aspect Areas with lack of designation information

Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8
NWPRTLH004	CRMRTLH021	CRDGNLH028	BRCKNLH117	DNBGHLH004	CNWLH004	YNSMNLH015
NWPRTLH006	CRMRTLH024	CRDGNLH032	BRCKNLH163	DNBGHLH006	CNWLH012	YNSMNLH027
NWPRTLH007	CRMRTLH025	CRDGNLH036	BRCKNLH168	DNBGHLH010	CNWLH013	YNSMNLH050
NWPRTLH015	CRMRTLH027	CRDGNLH043	BRCKNLH199	DNBGHLH011	CNWLH014	YNSMNLH053
NWPRTLH018	CRMRTLH042	CRDGNLH044	BRCKNLH314	DNBGHLH019	CNWLH028	YNSMNLH096
NWPRTLH029	CRMRTLH047	CRDGNLH064	BRCKNLH456	DNBGHLH031	CNWLH049	YNSMNLH102
NWPRTLH033	CRMRTLH059	CRDGNLH086	BRCKNLH549	DNBGHLH033	CNWLH058	YNSMNLH124
NWPRTLH036	CRMRTLH076	CRDGNLH087	BRCKNLH567	DNBGHLH038	CNWLH059	YNSMNLH130
NWPRTLH045	CRMRTLH087	CRDGNLH109	BRCKNLH619	DNBGHLH054	CNWLH083	
NWPRTLH048	CRMRTLH097	CRDGNLH112	BRCKNLH627	FLNTLH020	GWNDDLH000	
NWPRTLH055	CRMRTLH113	PMBRKLH392	BRCKNLH818	FLNTLH029	GWNDDLH149	
VLFGLLH118	NPTLH011	PMBRKLH608	BRCKNLH841	FLNTLH034	GWNDDLH151	

VLFGLLH270	NPTLH024	PMBRKLH728	BRCKNLH895	FLNTLH047	GWNDDLH171
VLFGLLH582	NPTLH026	PMBRKLH775	MNTGMLH005		GWNDDLH471
VLFGLLH659	NPTLH027	PMBRKLH785	MNTGMLH017		GWNDDLH472
VLFGLLH897	NPTLH028	PMBRKLH807	MNTGMLH043		GWNDDLH473
VLFGLLH932	NPTLH031	PMBRKLH880	MNTGMLH054		GWNDDLH474
VLFGLLH958	NPTLH033	PMBRKLH885	MNTGMLH056		GWNDDLH475
MNMTHLH002	NPTLH035	PMBRKLH943	MNTGMLH069		GWNDDLH479
MNMTHLH050	NPTLH036	PMBRKLH944	RDNRLH007		GWNDDLH480
MNMTHLH054	NPTLH037	PMBRKLH996	RDNRLH010		GWNDDLH482
MNMTHLH088	NPTLH052		RDNRLH017		GWNDDLH492
MNMTHLH098	NPTLH053		RDNRLH022		GWNDDLH499
MNMTHLH105	NPTLH056		RDNRLH025		GWNDDLH500
MNMTHLH118	NPTLH058		RDNRLH039		GWNDDLH505
MNMTHLH121	NPTLH066		RDNRLH048		GWNDDLH508
MNMTHLH127	NPTLH071				GWNDDLH528
MNMTHLH128	NPTLH072				GWNDDLH557
	NPTLH073				GWNDDLH561
	SWNSLH159				GWNDDLH562
	SWNSLH219				GWNDDLH564
	SWNSLH348				GWNDDLH565
	SWNSLH349				GWNDDLH567
	SWNSLH438				GWNDDLH568
	SWNSLH465				GWNDDLH575
	SWNSLH654				GWNDDLH578
	SWNSLH750				GWNDDLH587
	SWNSLH767				GWNDDLH607
	SWNSLH779				GWNDDLH619
					GWNDDLH624
					GWNDDLH630
					GWNDDLH650
					GWNDDLH663
					GWNDDLH669
					GWNDDLH672
					GWNDDLH678
					GWNDDLH940
					GWNDDLH948
					GWNDDLH953
					SNPLH001

		SNPLH008	
		SNPLH013	
		SNPLH051	
		SNPLH144	
		SNPLH162	
		SNPLH186	
		SNPLH215	
		SNPLH253	
		SNPLH262	
		SNPLH287	
		SNPLH318	
		SNPLH334	
		SNPLH378	
		SNPLH387	
		SNPLH388	
		SNPLH409	
		SNPLH423	
		SNPLH703	

6. Quality Assurance

6.1. Boundary Change and General Quality Assurance Method

Following external quality assurance further quality assurance was completed. This involved the viewing of at least 10% of each Aspect Area and specific questions raised by the external quality assurance. Table 6 shows the number of Aspect Areas quality assured and the number of corrections made.

Table 6: Proportion of Aspect Areas quality assured and percentage that needed amending

Area	Total No. of AA to be updated from 2015 changed detection pack	No. AA to be QA (min 10%)	No. of AA reviewed	Percentage of selected AA actually QA'd	No. amended following QA
2	291	29	28	58%	38%
3	330	47	46	60%	38%
4	351	35	35	100%	0%
5	357	36	61	143%	28%
6	232	23	24	103%	0%
7a	311	31	67	91%	9%
7b	311	31	94	91%	9%
8	144	14	12	69%	14%

⁷a) Quality assurance on general changes (Classifications)

For area 2 and area 3 the large percentage of aspect areas that required amending were due to Questions from 1a to 1d not representing the boundary changes that these Aspect Areas had undergone. Those with a percentage over 100% is because more Aspect Areas were quality assured due to general queries.

6.2. Evaluation Quality Assurance

Quality assurance of changes made from evaluation first underwent external quality assurance. Feedback from external quality assurance was assessed and if changes were agreed then the online portal was updated as required. Table 7 shows the Aspect Areas that were selected by external Quality assurance and whether changes suggested to be made were agreed with. In addition internal quality assurance of 20% of Aspect areas where evaluations were checked and updates were made where necessary.

⁷b) Quality assurance on Aspect areas requiring boundary changes.

Table 7: Conclusion of changes suggested from external quality assurance

Aspect Area	Quality Assurance Conclusion
MNMTHLH029	Agreed
PMBRKLH348	Agreed
PMBRKLH359	Agreed
PMBRKLH376	Agreed
SNPLH393	Agreed
SWNSLH479	Agreed
GWNDDLH565	Agreed
CRDGNLH040	Agreed
CNWLH027	Agreed
FLNTLH013	Agreed
GWNDDLH566	Agreed

7. Conclusions and Recommendations

The update has resulted in monitoring information being incorporated into LANDMAP for the whole of wales. This will future proof LANDMAP and make it a useful resource to feed into policies and practical land management decisions for the next three to five years. A small amount of work will however need to be completed to check the percentage of each area under designation, using Local Wildlife Site information, partially for areas with changed boundaries.

During the course of the study it became apparent that the Gwynedd and Snowdonia region (Area 7) is very differently composed than the rest of Wales. A complete re-working of this area is recommended to bring it in line with the rest of the Landscape Habitat features.

1. Appendix A: Task 1 - Evaluation Methodology

Review of Aspect Areas that consist of over 30% as managed for conservation, parts of which are SSSIs, but are not evaluated as "Outstanding"

In the LANDMAP methodology 'Outstanding' is given to areas as described in the process below.

Outstanding: Of international or national importance to the Aspect for example large

areas of the Aspect Area have an internationally important designation eg. Special Area of Conservation (SAC)or contain a cohesive and extensive network of internationally important habitat types or support

large populations of internationally significant species.

High: Of regional or county importance to the Aspect For example the area

contains a large proportion of sites of Special Scientific Interest (SSSI) or

similar quality habitat

Moderate: Of local importance to the Aspect. For example areas contain a network

of habitats of local importance such as Local nature reserve or Sites of Nature Conservation Interest or there are good proportions of common

habitats that link to form important corridors of resources.

Low: Of little or no importance to the Aspect

Unknown: Insufficient information exists to evaluate this Area

Where more than 30% of an area comprises sites with international importance but the area has not been designated as 'Outstanding' these have been identified for re-analysis. This re-analysis is also facilitated by the existence of new data layers:

- Forest habitats
- Habitat networks and connectivity maps including upland, Bog, Fen, Grass and Heath and lowland Networks with Bog, Fen, Grass, Heath and Wood
- And if any Aspect Areas are uncertain, the project manager will support this process by approaching the local planning authorities and NRW officers for their view/information.

Where an Aspect Area has more than 30% of land that is a designated as a protected site but it is not classified as outstanding the Aspect Area needs to be analysed to understand what habitat and species the designation is protecting in conjunction with; what is the majority of the landscape matrix of the Aspect Area and how this will support or not the habitats and species being protected. For example some very large upland SSSI's have areas of coniferous forest or improved hillside as they have been designated for the whole range of a species or habitat.

These different types of habitats might well make up a distinct Aspect Area. When considering the evaluation of the individual Aspect Area the details in the following tables should be used to ascertain if the protection of the area has a significant effect on the

components of the Landscape Habitats evaluation and then decide with clear justification why the area evaluation is changed. The additional datasets will be useful for understanding the role of the wider matrix of the Aspect Area and if it is part of a coherent habitat network supporting the designation or not. The forest dataset will show where significant species have been found within the wider forest network.

23. Are there clear opportunities to improve the biodiversity of this area?

Consider if the protection of the area present opportunities to improve the biodiversity of the area taking into account:

- what the designation is for and how the habitats support this designation
- whether any active management suggested by the designation enhance the overall biodiversity.
- if the protected area is part of a wider network and what effect his may give as an opportunity
- if there is evidence of different habitats and species given in the forest habitat data that might provide a clearer opportunity

Document this information in the change table

Priority Habitats - Collector Question 37

Priority Habitats are considered in terms of those habitats most characteristic of the area, although where there were significant areas of high quality habitats for example SSSI's these were described:

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low value habitats are where the landscape is mainly low diversity sown grass swards or arable land where fields are very large and have post and wire fences. Large urban areas with little green spaces lacking in biodiversity networks are also classed as low value.	Moderate habitats are those with a local importance. This includes areas of more intensively farmed land where there are still well managed stock-proof hedges and occasional areas of native vegetation for example; fragmented woodland blocks.	High importance is given where there are areas of national importance e.g. SSSI's which are enhanced by local features such as dense hedgerows, standard trees, species-rich areas or scrub and blocks of woodlands which form wildlife corridors. It will also include areas where many diverse habitats are linked together by hedges and or streams or there are important areas for protected species.	Outstanding value areas are either internationally important or nationally significant with the majority of the Aspect Area comprising National or Local BAP habitats or substantial percentage of SSSI habitats. Areas may also have high concentrations of protected species.	A lower evaluation would be appropriate if the Aspect Area is a distinct block of a very large SSSI/SAC and does not in itself contain a high portion of the habitats that are significant for the designation. Consider also the matrix surrounding any priority habitats of significance for the designations: Outstanding or high might not be appropriate if the area contains a large proportion of manmade habitats such as improved grassland / urban areas /arable / coniferous forestry plantation. Consider if the priority habitats protected are likely to be enhanced by the habitats in the surrounding matrix or at risk because of them.

Significance - Collector Question 38

Addresses the issue of whether the Aspect Area contains a high % of national resource.

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low significance occurs where the Aspect Area contained little or no significant national or local, native or semi-natural communities.	Moderate importance was awarded where the Aspect Area contained local BAP or other native or semi-natural habitats which may be draft Local Wildlife Sites; which although being fragmented still formed a small proportion of the Aspect Area.	contained important representative of BAP habitats or where there was a smaller but extremely important	Outstanding Aspect Areas contained a significant proportion of very valuable BAP habitats and habitats of international importance.	If 30% of an area is marked as protected but the area is largely not significant habitats then outstanding or high would not necessarily be appropriate for the 'Significance' score - this is especially true if the majority of habitats present are modified and might be posing some risk in terms of nutrient enrichment, drying out or invasive species to the priority habitats

Opportunity (to enhance resource) - Collector Question 39

Opportunity should be scored according to how easy it would be to enhance any existing moderate, high or outstanding habitats

pp				
Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low importance was given to areas where very significant effort or very large areas would need to be restored in order for the Aspect Area to form a significant part of the biodiversity network.	Moderate opportunity is awarded where either much effort would be needed to restore medium sized blocks of native habitats or where smaller changes to management practices would restore only small blocks of more fragmented communities.	High was awarded where with some input and change to management practice more important habitats of national and/or local significance could be formed which could enhance the overall biodiversity of the area and make larger areas of high quality resource.	Outstanding were areas adjacent to large, outstanding BAP habitats which with suitable management or minimal restoration would revert easily to these native habitats.	The land within the protected site should be carefully evaluated to understand if it has Outstanding / High/ Moderate opportunities for enhancement based on the amount of modified habitats within the area and how heavily modified these are. Many of the large protect sites have been chosen to represent the range of a species and might not necessarily be of outstanding opportunity / significance. If the existing evaluation is not justified, document the decision in the table.

Expansion rates - Collector Question 40

Increases in the semi-natural and valuable habitats and species assessed over the last 25 years

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low expansion rates are where there has been a loss in semi-natural habitats over the Aspect Area within the last 25 years	Moderate expansion rates are whether the Aspect Area has a stable amount of semi-natural land important habitats over the last 25 years	High expansion rates are where there has been a small increase in habitats or habitat networks within the Aspect Area over the last 25 years	Outstanding expansion rates are where there has been a significant increase in the amount of important seminaturel habitats over the last 25 years.	Consider here if the area protected by the designation is part of the expanded area of semi-natural habitat through active management of the site. If significant gains in habitats have happened an Outstanding designation would be justified, if the habitat remain statistic in their extent despite the designation then the normal evaluation criteria should be applied.

Sensitivity - Collector Question 41

How sensitive the area is to changes in land management and other practices that could adversely affect the biodiversity.

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Sensitive ecosystems being actively damaged by management of the area or surrounding areas/	Sensitive habitats which could be prone to damage by smaller changes in management practices etc of the area	Robust habitats where the management practices are not degrading the habitats to any extent.	Robust semi-natural ecosystems well protected by active management regimes against adverse changes.	Here the role of the designation in protecting existing habitats should be considered. If it is clear that the designation covers areas of modified habitats that are not contributing the too support of the protected species then

Expansion rates - Collector Question 40

Increases in the semi-natural and valuable habitats and species assessed over the last 25 years

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low expansion rates are where there has been a loss in semi-natural habitats over the Aspect Area within the last 25 years	Moderate expansion rates are whether the Aspect Area has a stable amount of semi-natural land important habitats over the last 25 years	High expansion rates are where there has been a small increase in habitats or habitat networks within the Aspect Area over the last 25 years	Outstanding expansion rates are where there has been a significant increase in the amount of important seminaturel habitats over the last 25 years.	Consider here if the area protected by the designation is part of the expanded area of semi-natural habitat through active management of the site. If significant gains in habitats have happened an Outstanding designation would be justified, if the habitat remain statistic in their extent despite the designation then the normal evaluation criteria should be applied.

Sensitivity - Collector Question 41

How sensitive the area is to changes in land management and other practices that could adversely affect the biodiversity.

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Sensitive ecosystems being actively damaged by management of the area or surrounding areas/	be prone to damage by		ecosystems well protected by	

Connectivity / cohesion - Collector Question 42

Describe how well the Aspect Area functions in terms of interconnection networks and corridors of native habitats which will allow for species movements and protect and enhance biodiversity

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Very little native habitats scattered throughout the landscape	streams or rivers to allow	viable sites for many species, or moderate sized blocks	sufficient habitats strongly related to other native areas	In this evaluation the protected sites should be evaluated in terms of their relationship to the existing networks for the Priority Habitats of importance within the Protected Area. If the area is part of one of the key networks

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Expansion	rates -	· Collector	Question 40

Increases in the semi-natural and valuable habitats and species assessed over the last 25 years

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Low expansion rates are where there has been a loss in semi-natural habitats over the Aspect Area within the last 25 years	Moderate expansion rates are whether the Aspect Area has a stable amount of semi-natural land important habitats over the last 25 years	High expansion rates are where there has been a small increase in habitats or habitat networks within the Aspect Area over the last 25 years	Outstanding expansion rates are where there has been a significant increase in the amount of important seminaturel habitats over the last 25 years.	Consider here if the area protected by the designation is part of the expanded area of semi-natural habitat through active management of the site. If significant gains in habitats have happened an Outstanding designation would be justified, if the habitat remain statistic in their extent despite the designation then the normal evaluation criteria should be applied.

Sensitivity - Collector Question 41

How sensitive the area is to changes in land management and other practices that could adversely affect the biodiversity.

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Sensitive ecosystems being actively damaged by management of the area or surrounding areas/	Sensitive habitats which could be prone to damage by smaller changes in management practices etc of the area	Robust habitats where the management practices are not degrading the habitats to any extent.	Robust semi-natural ecosystems well protected by active management regimes against adverse changes.	Here the role of the designation in protecting existing habitats should be considered. If it is clear that the designation covers areas of modified habitats that are not contributing the too support of the protected species then
	biodiversity corridors.			then the evaluation should be judged accordingly. If this changes the evaluation then document this in the change table

Habitat evaluation - Collector Question 43

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Mostly low value features described		Mostly high conditions met but if lower in some aspects outstanding in others		The habitat evaluation should still follow the evaluation criteria given the consideration of each individual question above. Justification

Expansion rates - Collector Question 40

Increases in the semi-natural and valuable habitats and species assessed over the last 25 years

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Low expansion rates are where there has been a loss in semi-natural habitats over the Aspect Area within the last 25 years	Moderate expansion rates are whether the Aspect Area has a stable amount of semi-natural land important habitats over the last 25 years	High expansion rates are where there has been a small increase in habitats or habitat networks within the Aspect Area over the last 25 years	Outstanding expansion rates are where there has been a significant increase in the amount of important seminaturel habitats over the last 25 years.	Consider here if the area protected by the designation is part of the expanded area of semi-natural habitat through active management of the site. If significant gains in habitats have happened an Outstanding designation would be justified, if the habitat remain statistic in their extent despite the designation then the normal evaluation criteria should be applied.

Sensitivity - Collector Question 41

How sensitive the area is to changes in land management and other practices that could adversely affect the biodiversity.

Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Sensitive ecosystems being actively damaged by management of the area or surrounding areas/	Sensitive habitats which could be prone to damage by smaller changes in management practices etc of the area	management practices are not degrading the habitats to any	Robust semi-natural ecosystems well protected by active management regimes against adverse changes.	existing habitats should be considered. If it
				for the evaluation should be made This change should be recorded in the change table

Importance for key species - Collector Question 44				
Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
No records of important species either local BAP or national BAP or protected species'	Local BAP species recorded as present or old records for important species but not recorded for over 15 years.	Many records of local or national BAP species and of importance nationally	Records of BAP species, protected species and species of international importance or where such species is represented by a particularly significant population.	Here particular note should be made of which species the designated area is covering and how the landscape matrix will support or contribute to that species protection: Outstanding or high might not be appropriate if the area contains a large proportion of manmade species such as improved grassland / urban areas /arable / coniferous forestry plantation and few or no actual records for the species protected by the designation.
Habitat and species evaluation	n - Collector Question 45			
Low (little importance)	Moderate (local importance)	High (national importance)	Outstanding (international importance)	Evaluation of areas of >30% protected sites not classified as high
Habitats and species have no particular importance	This will be awarded if either the species or the habitats have moderate importance. Where there is a nationally scarce species such as the otter but the habitats are only locally important than the overall evaluation will be taken as moderate.	Either the species or the habitats are of national importance.	Both species and habitats are of international importance and form a very substantial part of the Aspect Area.	This should consider the overall matrix of the landscape habitats the reason for the protected site designation and whether the designation actually are supporting these species and habitat in this Aspect Area taking into account all the answers to the questions given in the table above.

Justification of overall evaluation - Collector Question 45	
This section summarises all the information in the table so that it can be viewed with the polygons as a stand-alone field.	The justification should explain why the Aspect Area is protected and how the landscape habitats support this or not.