



Rhaglen Natura 2000 LIFE yng Nghymru: Ymdrin â Blaenoriaethu

LIFE Natura 2000 Programme for Wales: Approach to Prioritisation

Rhaglen Natura 2000 LIFE yng Nghymru
LIFE Natura 2000 Programme for Wales

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1. Cyflwyniad

Fel rhan o'r dasg o ddatblygu dull strategol o reoli ac adfer safleoedd Natura 2000 yng Nghymru, mae'n ofynnol i Raglen Natura 2000 LIFE sefydlu gweithdrefn ar gyfer blaenoriaethu camau gweithredu.

Mae blaenoriaethu'n sicrhau y caiff yr adnoddau cyfyngedig eu defnyddio yn y ffordd fwyaf effeithiol lle y mae eu hangen fwyaf. Mae'n caniatáu i gamau gweithredu gael eu targedu at y materion a'r risgiau hynny sy'n cael yr effaith fwyaf niweidiol ar gyflwr ffafriol. Ymhellach, mae'n atal adnoddau rhag cael eu taenu'n rhy denau ac mewn modd anghyfartal nes cyflawni fawr ddim.

Bydd camau gweithredu a gaiff eu pennu fel blaenoriaeth yn cael adnoddau yn gynharach na'r rheini nad ydynt yn flaenoriaeth. O'r herwydd, gellir ystyried y blaenoriaethu hwn fel ffordd o fynegi 'brys'.

Mae'r ddogfen hon yn pennu'r dull a ddefnyddiodd Rhaglen Natura 2000 LIFE i ddatblygu fframwaith â blaenoriaeth ar gyfer Natura 2000 yng Nghymru.

2. Introduction

As part of the development of a strategic approach to the management and restoration of Natura 2000 sites in Wales the LIFE Natura 2000 Programme is required to establish a procedure for prioritising actions.

Prioritisation ensures that limited resources are used to best effect where they are needed most. It allows actions to be targeted at those issues and risks which are having major adverse effects on favourable condition. It also prevents resources being spread so thinly and disparately that they achieve little.

Actions which are identified as priorities will receive resources at an earlier stage, than those which are not. The prioritising can therefore, be seen as an expression of 'urgency'.

This document sets out the approach which the LIFE Natura 2000 Programme has taken to developing a prioritisation framework for Natura 2000 in Wales.

3. Requirement to prioritise

Habitats Directive

Article 8 of the Habitats Directive requires Member States to produce a Prioritised Action Framework (PAF), to inform the Commission of N2K priorities and co-funding requirements. The PAF seeks to facilitate greater access to existing and new sources of finance by integrating N2K needs into major EU funds.

The revised PAF (version 2) for Wales is due to be submitted in 2016.

Water Framework Directive

Natural Resources Wales is required to produce a prioritised programme of measures to be delivered during Cycle 2 of the River Basin Management Plan process.

4. Rationale

While it is important to work towards reaching favourable condition for all Natura 2000 features on all sites, the number and extent of the actions required to do this is such that it would be impossible to deliver them all before 2020 given the current resources (or even with a significant input of EU funds). The prevailing economic conditions are also likely to result in declining day-job budgets and staff time resources from the public sector.

Given these circumstances there is a requirement to provide a robust and justified and agreed framework to determine where action shall be focused and why certain work cannot be done.

Opportunities, however, still exist to obtain funding support for N2K action, for example, from major external grant schemes (e.g. EU schemes, WG schemes), end of year underspends etc. In such cases, there may be many prospective ideas for projects, and guidance is needed as to where to best direct such investment.

Without a coherent, agreed prioritisation framework, the resources tend to be direct in an ad hoc manner, often to those who are best at producing and promoting applications, rather than where the need is greatest or the most strategic gains can be made.

5. Approach to prioritisation

This document sets out the approach which the LIFE Natura 2000 Programme has taken to developing a prioritisation framework for Natura 2000 in Wales. The approach is based on conservation needs of N2K rather than pragmatic or political criteria (e.g. ease of delivery, accessibility of funds). It also seeks to be an evidence based approach.

6. Scope and limitations of prioritisation

Under the Habitats Directive there is a duty to deliver appropriate conservation measures for all Natura 2000 habitat and species features and sites, so the prioritisation exercise is not a means of avoiding legal obligations or creating second-class features. Therefore, the prioritisation should not be seen as justification to cut back on existing resources or day-job services.

The prioritisation guidelines are intended to be used to help guide and inform decision-making, rather than as a rigid set of rules. They are not designed to prevent practitioners exploiting opportunities as they arise, for example, if land changes hands and the new owner is open to negotiating a management agreement when a previous owner was not, or if grants and other funding sources may be readily available for some lower priority actions but not higher ones.

However, the aim of the prioritisation is to ensure that work programmes are not dominated by numerous low priority actions being undertaken for practical reasons, to the detriment of tackling higher priority actions.

7. Scale

The prioritisation approach laid out here applies at two levels:

a) Prioritisation at the N2K site-level (within a given N2K site)

Prioritisation at this level is important, since in many cases, this is the level where management plans and operational plans are drawn up and key management decisions are made.

A single Natura 2000 site may have tens or hundreds of identified actions, many of which may be difficult or costly to deliver. The prioritisation allows such numbers to be reduced to a manageable and fundable workload, with a coherent timetable for delivery.

b) Prioritisation at a Wales-level (within the Natura 2000 series)

This applies where decisions are made, or funds and resources allocated at a national level, for example, schemes such as the Glastir agri-environment scheme, NRW Management Agreements, Welsh Government grant schemes, or match-funding for major externally funded projects.

8. Tools to enable prioritisation

The LIFE Natura 2000 Programme has developed a set of tools to facilitate decisions relating to prioritisation. The tools are described below. The tools operate at either the site level or Wales-level and focus on different aspects (e.g. on issues or on features). These allow decision-makers to select the tool which is most relevant to their needs.

Tool name	Level	Description
<u>Tool 1: Major issues and risks affecting the Natura 2000 series (and associated strategic actions)</u>	Wales level	<p>List of issues and risks (pressures and threats) having a major adverse impact on sites and species/habitat features across the N2K series. Identified from NRW Actions Database and stakeholders.</p> <p>Plus a list of strategic actions (logged as high, medium and low priority) as shown in the Thematic Action Plans.</p>
<u>Tool 2: Natura 2000 Feature Conservation Needs Analysis</u>	Wales level	<p>Multi-criteria decision analysis, identifying features with greatest conservation needs and legislative drivers. Separate analysis for habitats, birds, and other species, producing a ranking of features.</p> <p>Based on a systematic methodology, drawing on 14 different criteria such as site condition assessment, international conservation status, percentage of UK resource in Wales and climate vulnerability.</p>
<u>Tool 3: Matrix of prioritised issues/risks for sites (and associated site-level actions)</u>	Site level	<p>Assessment for each Natura 2000 site, of the priority issues and risks affecting the designated features of the site.</p> <p>Issues and risks are prioritised (high, medium, low) by NRW Conservation officers and partners based using a matrix based approach appraising severity and extent of an issue and likelihood and extent of a risk.</p> <p>Actions are linked to issues/risks and therefore are consequently prioritised.</p>

9. Priority highlights: Methodology

Individual practitioners may wish to use relevant individual tools to aid decision-making as they relate to their specific needs.

However, the LIFE Natura 2000 Programme have used the tools together to develop a set of priority 'highlights' for the 2015-20 period, which are included in the Prioritised Actions Framework (PAF). These provide an overall picture for Wales, but can also be used to identify priorities for specific broad sectors such as the marine environment.

The priority highlights can be reviewed on a regular basis.

Method for establishing priority highlights

The priority highlights are derived by identifying key 'messages' from the data derived from the tools described above, as follows:

- The highest ranked features were identified using the Conservation Needs Analysis (i.e. those with greatest conservation needs or legislative drivers). Where several high ranking features appeared which were components of the same ecosystem, then that ecosystem was deemed to be a priority ecosystem for Natura 2000 management. For example, two sand dune habitat features and four species which occur in sand dunes were highly ranked in the MCDA matrix, therefore sand dunes were deemed to be a priority ecosystem.
- For each priority ecosystem, Natura 2000 sites designated for the high ranking features at A or B classification were identified. A and B features are those which are a primary reason for selection of the site.
- Actions on these Natura 2000 sites were then cross-referenced against the high priority site actions (Tool 3) and the list of dominant issues/risks (Tool 1).

10. Priority highlights: Summary results

Priority highlights: Strategic issues and risks

- Access and recreation
- Air pollution
- Climate change
- Diffuse water pollution
- Flood and coastal erosion risk management
- Grazing and livestock management
- Habitat fragmentation
- Invasive species (native and non-native) and pathogens
- Man-made changes to hydraulic conditions
- Marine litter
- Sea fisheries
- Woodland management

Priority highlights: Ecosystems

- Peatlands – upland and lowland
- Sand dunes
- Rivers
- Woodlands

In the marine environment

- Lagoons and shingle
- Estuaries and saltmarsh

In all cases, habitats and species features are included.

11. Priority highlights: Detailed results

Peatlands – upland and lowland

Peatland habitat features have been identified as having particularly strong conservation needs and drivers, and a large proportion are currently in unfavourable condition. The particular features identified are:

- Active raised bogs
- Blanket bog
- Calcium-rich fen dominated by great fen sedge (saw sedge)
- Hard-water springs depositing lime
- Southern damselfly

Blanket bog is a key element of large upland N2K sites, such as Berwyn, while raised bogs and calcium-rich fens are found on smaller lowland site, such as Corsydd Mon and Cors Fochno.

Natura 2000 sites with listed with peatland features at A or B status and currently in unfavourable condition:

- Berwyn a Mynyddoedd de Clwyd/ Berwyn and South Clwyd Mountains SAC
- Cors Caron SAC
- Cors Fochno SAC
- Corsydd Môn/ Anglesey Fens SAC
- Crymlyn Bog/ Cors Crymlyn SAC
- Elenydd SAC
- Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses SAC
- Gower Commons/ Tiroedd Comin Gwyr SAC
- Migneint–Arenig–Dduallt SAC
- Preseli SAC
- Rhos Goch SAC

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Grazing and livestock management
- Man-made changes to hydraulic conditions
- Invasive species (native and non-native), parasites and pathogens
- Air pollution

Sand dunes

Two sand dune habitat features and four species features associated with dune ecosystems have been identified as having particularly strong conservation needs and drivers. The particular features identified are:

- Humid dune slacks
- Dune grassland
- Early gentian
- Fen orchid
- Petalwort
- Shore dock

Natura 2000 sites with listed with dune features at A or B status and currently in unfavourable condition:

- Carmarthen Bay Dunes/ Twyni Bae Caerfyrddin SAC
- Kenfig/ Cynffig SAC
- Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes SAC
- Limestone Coast of South West Wales/ Arfordir Calchfaen de Orllewin Cymru SAC
- Morfa Harlech a Morfa Dyffryn SAC

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Grazing and livestock management
- Invasive species (native and non-native), parasites and pathogens
- Man-made changes to hydraulic conditions
- Access and recreation

River features

River ecosystems in Wales support a number of vulnerable N2K species features which have particularly strong conservation needs and drivers. The particular features identified are:

- Atlantic salmon
- Freshwater pearl mussel
- White-clawed crayfish.

Natura 2000 river sites with features in A or B status and are currently in unfavourable condition:

- River Wye/ Afon Gwy SAC
- Afon Eden – Cors Goch Trawsfynydd SAC

- Afon Teifi/ River Teifi SAC
- River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC
- River Usk/ Afon Wysg SAC

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Man-made changes to hydraulic conditions
- Diffuse water pollution
- Invasive species (native and non-native), parasites and pathogens

Woodlands

Woodland habitat features have been identified as having particularly strong conservation needs and drivers, and a large proportion are currently in unfavourable condition. The particular features identified are:

- Western acidic oak woodland
- Mixed woodland on base-rich soils associated with rocky slopes
- Alder woodland on floodplains
- Yew-dominated woodland

Natura 2000 Woodland sites with features in A or B status and are currently in unfavourable condition:

- Alyn Valley Woods/ Coedwigoedd Dyffryn Alun SAC
- Blackmill Woodlands SAC
- Coed Cwm Einion SAC
- Coedwigoedd Dyffryn Elwy/ Elwy Valley Woods SAC
- Coedwigoedd Penrhyn Creuddyn/ Creuddyn Peninsula Woods SAC
- Coedydd a Cheunant Rheidol/ Rheidol Woods and Gorge SAC
- Coedydd Aber SAC
- Coedydd Derw a Safleoedd Ystlumod Meirion/ Meirionnydd Oakwoods and Bat Sites SAC
- Coedydd Llawr-y-glyn SAC
- Coedydd Nedd a Mellte SAC
- Coetiroedd Cwm Elan/ Elan Valley Woodlands SAC
- Cwm Doethie – Mynydd Mallaen SAC
- Gower Ash Woods/ Coedydd Ynn Gwyr SAC
- Llwyn SAC
- North Pembrokeshire Woodlands/ Coedydd Gogledd Sir Benfro SAC
- Sugar Loaf Woodlands SAC
- Wye Valley Woodlands/ Coetiroedd Dyffryn Gwy SAC

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Grazing and livestock management
- Invasive species (native and non-native), parasites and pathogens
- Woodland management
- Air pollution
- Access and recreation
- Other industries and development
- Habitat fragmentation

When considering the marine (including intertidal) environment only the following ecosystems were identified as highlight priorities.

Lagoons and associated vegetated shingle

Coastal lagoons and Vegetation of stony banks have been flagged as an area of the Welsh N2K network which have particularly strong conservation needs and drivers. These features also support a number of important SPA features. The particular features identified are:

- Coastal lagoons
- Vegetation of stony banks
- Arctic tern
- Common tern

Natura 2000 sites with listed features at A or B status and currently in unfavourable condition:

- Bae Cemlyn/ Cemlyn Bay SAC
- Pen Llyn a`r Sarnau/ Llyn Peninsula and the Sarnau SAC
- Ynys Feurig, Cemlyn Bay and The Skerries SPA

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Access and recreation
- Marine litter
- Invasive species (native and non-native), parasites and pathogens
- Flood and Coastal erosion risk management

Estuaries and saltmarshes

Estuaries and associated Atlantic Salt Marshes have been identified as features within the Welsh Natura 2000 network which have particularly strong conservation needs and drivers. These features are also important for supporting a large proportion of SPA features in Wales. The particular features identified are:

- Estuaries
- Atlantic salt meadows
- Bewick`s swan
- Greenland white-fronted goose
- Dunlin
- Bar-tailed godwit

Natura 2000 sites with listed features as an A or B status and currently in unfavourable condition:

- Carmarthen Bay and Estuaries/ Bae Caerfyrddin ac Aberoedd SAC
- Glannau Môn: Cors Heli / Anglesey Coast: Saltmarsh SAC
- Pembrokeshire Marine/ Sir Benfro Forol SAC
- Pen Llyn a`r Sarnau/ Lleyrn Peninsula and the Sarnau SAC
- Severn Estuary/Môr Hafren SAC and Severn Estuary SPA
- The Dee Estuary SPA
- Burry Inlet SPA

These features/sites are currently being affected by the following dominant issues and/or risks. Actions to address these issues have been identified at both a site level through the PIPs and a strategic level through the Thematic Action Plans.

- Access and recreation
- Grazing and livestock management
- Marine litter
- Diffuse water pollution
- Invasive species (native and non-native), parasites and pathogens
- Flood and coastal erosion risk management

12. Annex 1: Natura 2000 Prioritisation Tools

Tool 1: Major issues and risks affecting the Natura 2000 series (and associated strategic actions)

The following 12 issues and risks have been identified as having major adverse effect upon the Natura 2000 series. They occur frequently on many sites across the site series, often across a different ecosystems.

- Access and recreation
- Air pollution
- Climate change
- Diffuse water pollution
- Flood and coastal erosion risk management
- Grazing and livestock management
- Habitat fragmentation
- Invasive species (native and non-native) and pathogens
- Man-made changes to hydraulic conditions
- Marine litter
- Sea fisheries
- Woodland management

These issues/risks have been identified based on the frequency that they have been recorded in the NRW Actions Database with additional stakeholder input. See *LIFE Natura 2000 Programme Report 2: An Analysis of Issues and Risks*.

It is recommended that any large scale project or initiative seeking funding or support should address one or more of these issues.

Thematic Action Plans

For each major issue/risk, a set of strategic actions have been identified, as shown in the relevant LIFE Natura 2000 Thematic Action Plans. These are actions which will be delivered at a regional, Welsh, UK or international level. Actions have been prioritised high, medium and low, based on professional judgement of stakeholders.

The strategic actions have been identified by professionals with expertise in the field supported by information from the NRW Actions Database. The actions have been subject to consultation with stakeholders.

Tool 2: Natura 2000 Feature Conservation Needs Analysis

A multi-criteria decision analysis (MCDA) has been used to establish, in the most objective way possible, those features across Wales which have the highest conservation management needs and drivers. The MCDA uses a systematic approach to discover and quantify stakeholder considerations about various factors, in order to compare and rank the Natura 2000 features.

MCDAs are commonly used in environmental decision-making where the factors affecting decision-making are heterogeneous and uncertain in nature, and do not lend themselves to monetary valuation. In this case, the MCDA is based on a range of criteria which represent different aspects which may be considered when deciding what actions to take first. The MCDA may also be used as a guide to inform funding for larger-scale projects and initiatives. By using a range of criteria a balanced view of the features' needs is gained.

Method

The rationale and method for producing the MCDA is described in full in *Multi-Criteria Decision Analysis (MCDA) for Natura 2000 Features in Wales – Conservation Needs Assessment, ADAS UK, 2015*.

The Natura 2000 Feature Needs Analysis MCDA is based on a UK standard MCDA methodology. Published or readily available data was sourced for each criteria, and the MCDA can be updated with new data and re-run as required.

Three separate MCDAs have been created for: Habitats Directive Annex I habitats; Annex II species; and Birds Directive Annex I species. This was due to challenges when comparing inherently different feature groups – the separate matrices allows similar features to be assessed using the most targeted data available.

The table below shows the list of criteria used in the MCDA to assess the different feature groups. It also shows how criteria of a similar type were brigaded into clusters of similar thematic relevance.

Table 1: Criteria used to develop MCDA matrices

Criteria	Cluster	Matrix
Habitats Directive Priority Feature	Legal/Policy	Habitats
Section 42 Habitats and Species of Principle Importance for Conservation in Wales	Legal/Policy	Habitats, Species, Birds
Highly water dependent (aquatic) feature with drivers under Water Framework Directive	Legal/Policy	Habitats, Species, Birds
UK special responsibility	Coverage	Habitats, Species
Percentage of UK resource in Wales (Wales special responsibility)	Coverage	Habitats, Species, Birds
Habitats Directive Article 17 reporting status	Conservation status	Habitats, Species
Percentage of sites in with feature in favourable condition (current condition of feature on N2K sites in Wales)	Conservation status	Habitats, Species
International conservation status	Conservation status	Species, Birds
Birds Of Conservation Concern (BOCC) List	Conservation status	Birds
Climate change vulnerability index	Sensitivity	Habitats, Species, Birds
Range of ecosystem service provision	Value	Habitats, Species
Number of sites designated for feature	Rarity	Habitats, Species, Birds
UK population trend (long term)	Population trend	Birds
UK population trend (short term)	Population trend	Birds

All criteria were objectively scored against a transparent underlying dataset. The scoring process was used to convert the transformed raw data to a 0 – 100 scale, where a score of 0 for a feature on a given criterion corresponds to the lowest raw data score and 100 to the highest.

Common Name	Feature Type	Legal and Policy Drivers			Coverage		Con Stat	Current Condition of N2K sites in Wales	Sensitivity	Value	Rarity
		Habitats Directive Priority Feature	WFD Feature Interest	S.42	UK special responsibility	Wales special responsibility					
Active raised bogs	Raised Bog, Mire, Fen	y	y	y	y	10.7	BD	0	High	Medium	7
Base-rich fens	Raised Bog, Mire, Fen	n	y	y	n	3.6	BI	42.86	High	High	7
Alder woodland on floodplains	Forests	y	y	y	n	40	BS	45.45	Medium	High	11
Alpine and sub-alpine heaths	Temperate Heath / Scrub	n	n	y	y	0.1	BS	0	Medium	Medium	2
Alpine and subalpine calcareous grasslands	Natural / Semi-Natural Grassland	n	n	y	n	0.2	BS	100	Medium	High	1
High-altitude plant communities associated with areas of water seepage	Raised Bog, Mire, Fen	y	y	y	n	3.8	BI	100	Medium	High	1
Annual vegetation of drift lines	Marine, Coastal, Halophytic	n	n	y	n	8.1	BS	100	Medium	High	1



Raw data converted into a score

Common Name	Feature Type	Legal and Policy Drivers			Coverage		Con Stat	Current Condition of N2K sites in Wales	Sensitivity	Value	Rarity
		Habitats Directive Priority Feature	WFD Feature Interest	S.42	UK special responsibility	Wales special responsibility					
Active raised bogs	Raised Bog, Mire, Fen	100.00	100.00	100.00	100.00	14.34	100.00	100.00	100.00	50.00	10.00
Base-rich fens	Raised Bog, Mire, Fen	0.00	100.00	100.00	0.00	4.83	66.66	57.14	100.00	100.00	10.00
Alder woodland on floodplains	Forests	100.00	100.00	100.00	0.00	53.62	83.33	54.55	50.00	100.00	4.55
Alpine and sub-alpine heaths	Temperate Heath / Scrub	0.00	0.00	100.00	100.00	0.13	83.33	100.00	50.00	50.00	47.50
Alpine and subalpine calcareous grasslands	Natural / Semi-Natural Grassland	0.00	0.00	100.00	0.00	0.27	83.33	0.00	50.00	100.00	100.00
High-altitude plant communities associated with areas of water seepage	Raised Bog, Mire, Fen	100.00	100.00	100.00	0.00	5.09	66.66	0.00	50.00	100.00	100.00
Annual vegetation of drift lines	Marine, Coastal, Halophytic	0.00	0.00	100.00	0.00	10.86	83.33	0.00	50.00	100.00	100.00

After the criteria and scoring were established weights were assigned to each of the criteria. To do this a “swing” methodology was used, which required decision-makers to consider the relative meaning of a change in value between the minimum and maximum scores possible on each criterion.

Swing comparisons were made first at criteria level and then between clusters. This was done by making pairwise comparisons to the criterion where the swing is perceived to be the greatest and noting the relative difference as a percentage. Weights are then elicited by applying the percentages across each criteria and within each cluster on a pro-rata basis.

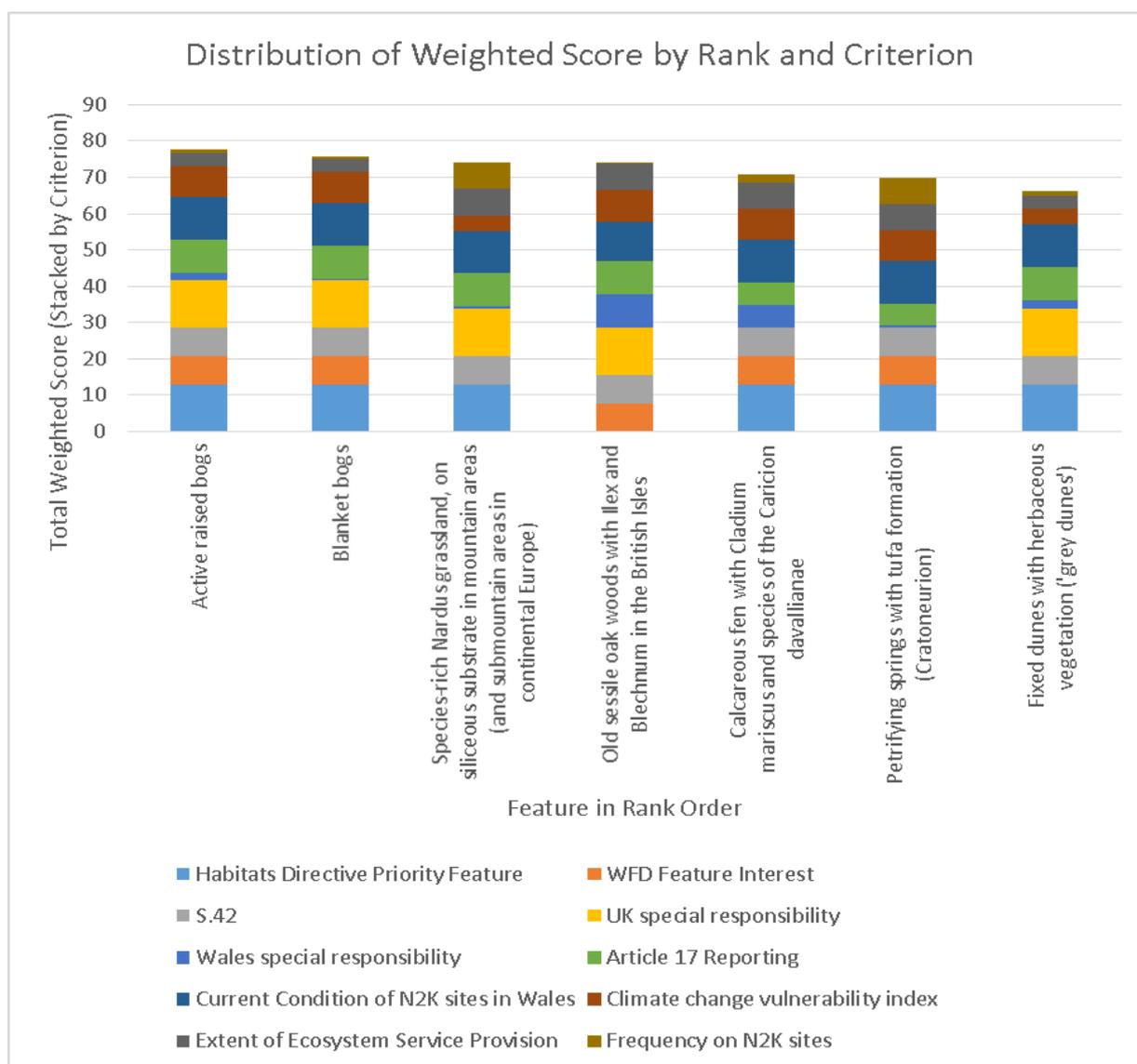
This section allows users to input their own swing weight scores. You MUST use the "Clear Input" button to clear the scores before starting again!
 White cells indicate where user input or feedback required. Coloured cells should not be edited, except where indicated otherwise

Criteria	Legal and Policy Drivers			Coverage		Con Stat	Current Condition of N2K sites in Wales	Sensitivity	Value	Rarity
	Habitats Directive Priority Feature	WFD Feature Interest	S.42	UK special responsibility	Wales special responsibility					
Round 1 Score	100	60	60	90	100	80	100	100	100	100
Round 1 Winner	100				100		100	100	100	100
Round 2 Score	90				100		80	60	50	50
Final Swing Score	90	54	54	90	100	64	80	60	50	50
Final Weights	0.130	0.078	0.078	0.130	0.145	0.092	0.116	0.087	0.072	0.072

The score for each feature against each criterion was multiplied by the criterion weight, and then the weighted scores added for each feature, to give an overall number. This resulted in the feature with the highest score being top ranked and so on down to the lowest score.

		Weighted Score										
		Legal and Policy Drivers		Coverage			Con Stat		Sensitivity	Value	Rarity	
Common Name	Feature Type	Habitats Directive Priority Feature	WFD Feature Interest	S.42	UK special responsibility	Wales special responsibility	Article 17 Reporting	Current Condition of N2K sites in Wales	Climate change vulnerability index	Extent of Ecosystem Service Provision	Frequency on N2K sites	OVERALL
Active raised bogs	Raised Bog, Mire, Fen	13.01	7.80	7.80	13.01	2.07	9.25	11.56	8.67	3.61	0.72	77.51
Base-rich fens	Raised Bog, Mire, Fen	0.00	7.80	7.80	0.00	0.70	6.17	6.61	8.67	7.23	0.72	45.69
Alder woodland on floodplains	Forests	13.01	7.80	7.80	0.00	7.75	7.71	6.31	4.34	7.23	0.33	62.26
Alpine and sub-alpine heaths	Temperate Heath / Scrub	0.00	0.00	7.80	13.01	0.02	7.71	11.56	4.34	3.61	3.43	51.48
Alpine and subalpine calcareous grasslands	Natural / Semi-Natural Grassland	0.00	0.00	7.80	0.00	0.04	7.71	0.00	4.34	7.23	7.23	34.34
High-altitude plant communities associated with areas of water seepage	Raised Bog, Mire, Fen	13.01	7.80	7.80	0.00	0.74	6.17	0.00	4.34	7.23	7.23	54.30
Annual vegetation of drift lines	Marine, Coastal, Halophytic	0.00	0.00	7.80	0.00	1.57	7.71	0.00	4.34	7.23	7.23	35.87

Analysis of the results was done by assessing tabular and chart outputs and then repeating the criteria selection, scoring, and weighting exercise if results appeared inconsistent or irregular.



Tool 3: Matrix of prioritised issues/risks for sites (and associated site-level actions)

The LIFE Natura 2000 Programme has developed a method for establishing site priorities by assessing the adverse impact of issues and risks affecting individual features on the site.

It employs a criteria-based matrix approach to maximise consistency and transparency. The *Extent* of the issue is assessed and appraised alongside the level of *Impact* that issue is having on the feature in question. For marine sites an additional element of *Management* is also included. Urgency of the need to address the issue is also considered separately. More details are shown below.

NRW Conservation Officers were primarily responsible for the prioritisation, although the results have been subject to consultation by internal and external stakeholders.

Where one issue affects several features on a site and they have different priorities, a 'highest trumps all' approach is taken. That is, for the whole site the issue is considered to have the highest priority amongst those awarded to individual features.

All actions are linked to an issue or risk. Any given action is awarded the priority and urgency of the associated issue for that site. For example, if overgrazing is classed as a high priority issue on a site, all actions identified to address overgrazing on that site will be classed as high priority actions for delivery.

Only high and medium priority issues/actions are included on the Prioritised Improvement Plans. This is effectively provides the first 'sift', however, some sites are still be left with high numbers of actions, so it is also possible to prioritise again by including Urgency as an additional factor to establish a realistic timetable for delivery.

Prioritisation process for issues

Criteria

Extent	
Estimate of the extent to which the issue affects the feature within the site (i.e. how much of the habitat feature or the habitats used by a species feature are affected).	
Low	less than 10% of site area
Medium	11- 49% of site area
High	50 -100% of site area

Severity	
Estimate of the severity of impact an issue has on the feature within the site.	
Low	minor degradation of habitat/few individuals affected
Medium	moderately degraded habitat/most of the population affected
High	seriously degraded habitat/whole populations affected

Priority Matrix

		Severity		
		Low	Medium	High
Extent	High	Moderate	High	High
	Medium	Low	Moderate	High
	Low	Low	Low	Moderate

Urgency

Urgency	
Estimate of the urgency of resolving the issue (i.e. how quickly action is required to be taken to prevent the affects of the issue becoming irreversible)	
Short term	(0-2 years), action must be taken urgently to address the impact of the issue
Medium term	(3-5 years), action to address the issue is required in the medium term
Long term	(6+ years), action to address the issue is not urgently needed

**Example of completed issue prioritisation matrix for a terrestrial site
(showing a single feature only)**

Issue Prioritisation Matrix				
Site	Elenydd SAC			
Conservation Officer	Emma Smith			
Date	23-Jun-14			
Feature	Calaminarian grasslands of the <i>Violetalia calaminariae</i>			
Condition Assessment	Favourable: Un-classified			
Date Assessed	Nov -12			
Feature Climate Vulnerability Classification	Low			
Site Climate Vulnerability Index (CVI)	Medium			
Issue	Extent	Severity	Priority	Urgency
	E	S	$P = E \times S$	U
Inappropriate vehicle use	H	M	H	L
Air pollution	H	L	M	H
Grazing overgrazing	H	L	M	L
Grazing type and/or timing	M	L	L	L
Cutting/ Mowing - insufficient	M	M	M	H
Fire - deliberate or accidental	L	H	M	M
Grazing insufficient grazing	H	H	H	M
Terrestrial - native and archaeophyte	L	H	M	H
Terrestrial - non-native	M	L	L	M

Prioritisation process for risks

Criteria

Severity	
Estimate of the severity a risk would have on the feature within the site, should it occur, taking into account management that is currently in place.	
Low	minor degradation of habitat/few individuals affected if risk occurs
Medium	moderate degradation habitat/most of the population affected if risk occurs
High	serious degradation habitat/whole populations affected if risk occurs

Likelihood of occurrence	
Estimate of the likelihood the risk will occur.	
Low	low likelihood of risk becoming an issue (appropriate measures are in place and are unlikely to change)
Medium	moderate likelihood of risk becoming an issue (not all appropriate measures are in place)
High	high likelihood of the risk becoming an issue (measures are not in place/suitable)

Priority Matrix

		Severity		
		Low	Medium	High
Likelihood	High	Moderate	High	High
	Medium	Low	Moderate	High
	Low	Low	Low	Moderate

**Example of completed risk prioritisation matrix for a terrestrial site
(showing a single feature only)**

Risk Feature Matrix			
Site	Elenydd SAC		
Conservation Officer	Emma Smith		
Date	23/06/2014		
Feature	European dry heaths		
Condition Assessment	Unfavourable: Un-classified		
Date assessed	Aug-12		
Risk	Severity	Likelihood	Risk Priority
	S	L	RP = SxL
Fertiliser use	H	L	M
Forest planting on open ground	H	L	M
Quarrying and mining	M	L	L
Energy production - renewables: wind	M	M	M
Roads, paths and railroads	L	H	M
Terrestrial - non-native species	L	H	M