

Cynllun Gweithredu Thematig Natura 2000 Rheoli Coetiroedd

Natura 2000 Thematic Action Plan Woodland Management

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



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Contents

Acknowledgements	3
1. Cyflwyniad	4
2. Introduction	6
3. Background	8
4. Issues and risks	9
5. Policy and legislative context	11
6. Current mechanisms and planned actions on sites to 2020	13
7. Rationale for strategic actions	15
8. Development of strategic actions	16
	2

9. Strategic actions for Natura 2000 in Wales: Inappropriate Woodland Management	17
Appendix A:	20
Appendix B:	22

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October 2015

1. Cyflwyniad

Rhaglen Natura 2000 LIFE yng Nghymru

Mae 92 Ardal Cadwraeth Arbennig (ACA) ac 20 Ardal Gwarchodaeth Arbennig (AGA) Cymru'n cynnwys 123 o nodweddion cynefinoedd a rhywogaethau dynodedig. Gyda'i gilydd, y rhain yw rhwydwaith Natura 2000.

Mae Rhaglen Natura 2000 LIFE yng Nghymru wedi datblygu blaen-gynllyn strategol i reoli ac adfer Natura 2000 yng Nghymru. Drwy weithio â rhanddeiliaid mae wedi pennu'r prif heriau sy'n wynebu'r safleoedd, y rhywogaethau a'r cynefinoedd hyn a warchodir gan Ewrop, a nodi'r camau gweithredu sydd eu hangen, y blaenoriaethau, y costau a'r cyfleoedd cyllido i fynd i'r afael â nhw. Cafodd y rhaglen ei chynnal gan Cyfoeth Naturiol Cymru a'i hariannu gan gynllun LIFE+ Nature yr Undeb Ewropeaidd.

Y pwrpas yw galluogi Cymru i wneud cynnydd sylweddol tuag at sicrhau bod rhywogaethau a chynefinoedd Natura 2000 mewn cyflwr ffafriol a helpu i gyflawni ei hymrwymiadau o dan Gyfarwyddeb Cynefinoedd ac Adar yr Undeb Ewropeaidd. Mae'r Rhaglen yn ceisio darparu llwyfan hefyd i sicrhau rhagor o gyllid ar gyfer prosiectau sy'n gysylltiedig â Natura 2000 o bob ffynhonnell bosibl, ac i integreiddio cyllid Natura 2000 mewn offerynnau ariannol a meysydd polisi eraill.

Mae manylion llawn Rhaglen Natura 2000 LIFE a rhwydwaith Natura 2000 yng Nghymru yn Ffeithiau a Ffigurau, Rhaglen Natura 2000 LIFE yng Nghymru: Adroddiad 1.

Cynlluniau Gweithredu Thematig

Mae Rhaglen Natura 2000 LIFE wedi creu 11 Cynllun Gweithredu Thematig, pob un yn ymdrin â chamau gweithredu strategol blaenoriaeth i fynd i'r afael â'r prif broblemau a'r risgiau¹ a nodwyd fel y rhai sy'n cael effaith andwyol ar nodweddion Natura 2000 ledled y rhwydwaith.

Y Cynlluniau Gweithredu Thematig yw:

- Mynediad a hamdden
- Llygredd aer: Gwaddodi nitrogen
- Newid yn yr hinsawdd a chwalu cynefinoedd
- Llygredd dŵr gwasgaredig
- Rheoli perygl llifogydd ac erydu arfordirol
- Rheoli pori a da byw
- o Rhywogaethau a phathogenau estron goresgynnol
- o Newidiadau gan ddyn i amodau hydrolig
- Sbwriel y môr
- Pysgodfeydd morol
- Rheoli coetiroedd

¹ Problemau (neu bwysau) yw adweithiau andwyol i nodweddion Natura 2000 sy'n digwydd ar hyn o bryd ar neu yng nghyffiniau ACA neu AGA sy'n rhwystro'r rhywogaeth neu'r cynefin dynodedig rhag cyrraedd cyflwr ffafriol. Risgiau (neu fygythiadau) i nodweddion Natura 2000 sy'n debygol o ddigwydd erbyn 2020.

Y brif gynulleidfa ar gyfer y Cynlluniau Gweithredu yw rheolwr, pobl sy'n gwneud penderfyniadau a chyllidwyr yn Cyfoeth Naturiol Cymru, Llywodraeth Cymru a sefydliadau partner allweddol.

Mae'r camau gweithredu i'w gweld yn y tabl yn Adran 9. Camau yw'r rhain y gellir eu cyflawni ar lefel genedlaethol neu ranbarthol, i ategu camau gweithredu ar safleoedd o fewn Cynlluniau Gwella â Blaenoriaeth. Maent yn ceisio mynd i'r afael â rhwystrau sylfaenol, a'u hachosion lle bo'n bosibl, a datblygu fframwaith strwythurol sy'n cefnogi ac yn hyrwyddo trefniadau rheoli priodol yn lleol. Mae'r camau gweithredu'n cynnwys y rhai sydd eu hangen i fynd i'r afael â bylchau mewn tystiolaeth sy'n atal dealltwriaeth lawn o anghenion rheoli.

Gall rhai camau gweithredu strategol gynnig ffrydiau gwaith newydd a mentrau mawr; mae eraill yn cyd-fynd i raddau helaeth â pholisïau, strategaethau a rhaglenni gwaith sy'n bodoli eisoes neu sydd wrthi'n cael eu datblygu.

Cafodd y camau gweithredu strategol eu nodi yn ystod gweithdai a gynhaliwyd gyda gweithwyr proffesiynol arbenigol yn y maes, o Cyfoeth Naturiol Cymru a sefydliadau eraill. Roeddynt yn seiliedig hefyd ar grynodebau o gamau gweithredu ar safleoedd a oedd yn deillio o'r Cynlluniau Gwella â Blaenoriaeth a'r Gronfa Ddata Camau Gweithredu (gweler isod). Cafodd y rhain eu hadolygu a'u dilysu gan weithgor bychan a buont yn destun proses ymgysylltu a thrafod gyda rhanddeiliaid hefyd. Gweler Adran 8 am ragor o fanylion.

Y camau gweithredu strategol yw'r rhai a nodwyd sydd eu hangen i gael y nodweddion i gyflwr ffafriol. Maent yn amodol ar y graddau y mae adnoddau ar gael ac ar gytundeb rhanddeiliaid. Nid ydynt yn cynrychioli cynllun gweithredol sydd wedi'i ariannu'n llawn nac wedi ymrwymo'n llawn iddo. Fodd bynnag, y bwriad yw defnyddio'r camau gweithredu i lywio amrywiaeth o gynlluniau gweithredol a rhaglenni gwaith yn y dyfodol.

Er bod y camau gweithredu strategol yn canolbwyntio ar gyfres Natura 2000, gellir defnyddio llawer ohonynt yn eang a gallent fod o fudd i Safleoedd o Ddiddordeb Gwyddonol Arbennig a helpu i warchod bioamrywiaeth a chryfhau'r ecosystem yn yr amgylchedd ehangach.

Cynlluniau Gwella â Blaenoriaeth a Chronfa Ddata Camau Gweithredu

Mae Rhaglen Natura 2000 LIFE wedi cynhyrchu Cynlluniau Gwella â Blaenoriaeth ar gyfer pob safle Natura 2000 yng Nghymru. Mae'r cynlluniau hyn yn nodi'r prif broblemau a risgiau sy'n effeithio ar nodweddion Natura 2000 ac yn disgrifio'r camau gweithredu â blaenoriaeth, wedi'u costio, sydd eu hangen i gael a chynnal nodweddion y safle mewn cyflwr ffafriol. Mae'r cynlluniau'n defnyddio gwybodaeth o Gronfa Ddata Camau Gweithredu Cyfoeth Naturiol Cymru sy'n cynnwys yr holl gamau gweithredu (blaenoriaeth uchel, canolig, isel) ar gyfer safleoedd Natura 2000. Datblygwyd y camau gweithredu gan Swyddogion Cadwraeth Cyfoeth Naturiol Cymru ar y cyd â rhanddeiliaid a phartneriaid. Cafodd cynnwys y Gronfa Ddata ei ymestyn a'i ddiweddaru'n llawn yn ystod 2014/5.

2. Introduction

LIFE Natura 2000 Programme for Wales

There are 123 designated habitat and species features on the 92 Special Areas of Conservation (SACs) and 20 Special Protection Areas (SPAs) in Wales. Together these comprise the Natura 2000 network.

The LIFE Natura 2000 Programme for Wales has developed a strategic forward plan to manage and restore Natura 2000 in Wales. Working with stakeholders it has determined the key challenges facing these European protected sites, species and habitats and identified the actions required, priorities, costs and funding opportunities to address them. The Programme was run by Natural Resources Wales (NRW) and funded by the European Union scheme LIFE+ Nature.

The purpose of the Programme is to enable Wales to make significant progress towards bringing Natura 2000 species and habitats into favourable condition and help meet its commitments under the European Habitats and Birds Directives. The Programme also aims to provide a platform to seek further funding for Natura 2000 related projects from all potential sources, and to integrate Natura 2000 funding into other financial instruments and policy areas.

Full details about the LIFE Natura 2000 Programme and the Natura 2000 network in Wales can be found in the *LIFE Natura 2000 Programme for Wales: Fact and Figures Report 1*.

Thematic Action Plans

The LIFE Natura 2000 Programme has created 11 Thematic Action Plans, each of which detail priority strategic actions to address major issues and risks² which have been identified as having an adverse impact on Natura 2000 features across the network.

The Thematic Action Plans are as follows:

- Access and recreation
- o Air pollution: Nitrogen deposition
- Climate change and habitat fragmentation
- o Diffuse water pollution
- o Flood and coastal erosion risk management
- o Grazing and livestock management
- Non-native invasive species and pathogens
- Man-made changes to hydraulic conditions
- Marine litter
- Marine fisheries
- o Woodland management

² Issues (or pressures) are adverse impacts to Natura 2000 features which are currently taking place on or around SACs or SPAs and which act as barriers to the designated habitat or species features reaching favourable condition. Risks (or threats) are adverse impacts to Natura 2000 features which are likely to occur by 2020.

The primary audience for the Actions Plans are managers, decision makers and fund holders within Natural Resources Wales, Welsh Government and key partner organisations.

The strategic actions are set out in the table in Section 9. These are actions which may be delivered at national or regional level, to complement the site-level actions within Prioritised Improvement Plans (PIPs). They seek to address fundamental barriers and where possible their root causes, and aim to develop a structural framework which supports and promotes appropriate management at a local level. Actions include those needed to address evidence gaps which are hindering full understanding of management needs. Some strategic actions may propose new work streams and larger-scale initiatives; others align closely to existing or developing policies, strategies and work programmes.

The strategic actions were identified during workshops held with professionals with expertise in the field, from Natural Resources Wales and other organisations. These were also informed by summaries of site level actions derived from the PIPs and Actions Database (see below). These were reviewed and validated by a small working group and also subject to a process of engagement and discussion with stakeholders. See Section 8 for more details.

The strategic actions are those which have been identified as being required to bring features into favourable condition. They are subject to resource availability and stakeholder agreement. They do not represent a fully funded or committed operational plan. However, the intention is that the actions will be used to inform a range of operational plans and work programmes in the future.

While the strategic actions are focused on the Natura 2000 series, many have a broad applicability and may also be of benefit to Sites of Special Scientific Interest and other biodiversity conservation and ecosystem resilience work in the wider environment.

Prioritised Improvement Plans and Actions Database

The LIFE Natura 2000 Programme has produced Prioritised Improvement Plans (PIPs) for all Natura 2000 sites in Wales. The PIPs identify the main issues and risks affecting the Natura 2000 features on the site and describe costed, prioritised actions required to achieve and maintain the site features in favourable condition.

The PIPs draw information from the Natural Resources Wales Actions Database which hold all actions (high, medium, low priority) for Natura 2000 sites. Actions were developed by Natural Resources Wales Conservation Officers in association with stakeholders and partners. The content of the Database was fully extended and updated during 2014/5.

3. Background

The way we manage our woodlands has the potential to have adverse or favourable effects on the condition of Natura 2000 features in Wales. Work carried out by the LIFE Natura 2000 Programme for Wales in 2014/15 has identified inappropriate management of woodlands as a priority issue/risk affecting Natura 2000 features in Wales.³ This is consistent with the most recent round of UK level biodiversity reporting; the 10th UK 'Article 12 report'⁴ and the 3rd 'Article 17 report'⁵ which show that inappropriate woodland management is having (or has the potential to have) adverse impacts on the condition of SAC and SPA features in across the UK.

This Thematic Action Plan considers existing issues (pressures) and potential future risks (threats) likely to have an impact by 2020 due to inappropriate woodland management. These include the following:

- Inappropriate woodland management
- Insufficient woodland/tree management
- Inappropriate tree planting
- Inappropriate felling and management
- Negative effects of deer grazing and browsing (native and non-native species of deer)

The issues and risks described above refer to both current and historic inappropriate management. The adverse effects of historic activities such as planting of non-native species or selective felling can persist for decades after the activity has ceased, due to the long timescales involved with woodland ecosystems.

The plan does not seek to address issues and risks to woodland Natura 2000 features caused by invasive non-natives species (other than deer), diseases and pathogens, grazing by livestock, access and recreation or air pollution as these are covered in other Thematic Action Plans.

The main focus of this plan is on inappropriate woodland management, within or around, semi-natural woodland SACs. However, inappropriate management of woodland or forestry plantations can result in adverse effects on nearby non-woodland Natura 2000 sites such as lake or rivers (due to diffuse pollution, acidification, siltation), heaths and wetlands (due to scrub encroachment, seeding, drying out) and sand dunes (due to historic planting on dunes), and these factors are considered within this plan.

³ Natural Resources Wales, 2015. LIFE Natura 2000 Programme for Wales Summary Report.

⁴ Joint Nature Conservation Committee 2013. 10th Report by the United Kingdom under Article 12 on the implementation of the Directive on the conservation of wild birds (2009/147/EC) from January 2008 to December 2012. JNCC, Peterborough.

⁵ Joint Nature Conservation Committee 2013. Summary of conclusions & qualifiers – 3rd UK Habitats Directive Reporting 2013.

4. Issues and risks

The LIFE Natura 2000 Programme data shows that inappropriate or inadequate woodland management and the negative effects of deer are having (or likely to have) an impact on 44 out of 123 different Natura 2000 habitat or species features (36%), on 47 out of 112 Natura 2000 sites across Wales (42%). Table 1 provides a list of features most frequently affected. For a full list of sites and features affected see Appendices A and B respectively.

A total of 202 instances of issues and risks related to inappropriate woodland management were recorded across the Natura 2000 series, out of a total of 3,090 records (for all types of issue and risk across Wales) (6.5%). Of these 182 instances were recorded on individual management units, out of a total of 2,488 across Wales (7%), and 20 instances were recorded for whole sites out of a total of 602 (3%).⁶

Table 1. Natura 2000 features most frequently adversely affected by inappropriate woodland management

Features (common name)	Number of instances feature affected			
· · · · · · · · · · · · · · · · · · ·	Unit level	Site level	Total	
Western acidic oak woodland	57	2	59	
Mixed woodland on base-rich soils associated with rocky slopes	47	6	53	
Degraded raised bogs	21	-	21	
Beech forests on neutral to rich soils	14	4	18	
Dry heaths	14	2	16	
Great crested newt	15	-	15	
Grasslands on soils rich in heavy metals	14	1	15	
Blanket bog	7	3	10	
Yew-dominated woodland	5	2	7	
Alluvial forests	4	2	6	
Dry grasslands and scrublands or chalk or limestone	5	-	5	
Red kite	4	1	5	
Lesser horseshoe bat	1	4	5	

The 'number of instances' indicates the number of times inappropriate woodland management is logged as an issue or risk for the feature at either a detailed management unit level or whole site level, on SACs and SPAs in Wales. This includes high, medium and low priority issues/risks.

Management units are sub-divisions of Natura 2000 sites based on landownership or ecological differences. Issues and risks are recorded as either at a 'site level' (if the affects occur across the site) or 'unit level' (if the impacts are localised).

The information is derived from the LIFE Natura 2000 Programme data held in the NRW Actions Database. Sourced September 2015.

⁶ In general, for a given site, issues and risks are recorded at *either* a unit level (if part of the site is affected) *or* site level (if the whole or majority of the site is affected); not both.

The major impact of inappropriate woodland management is, not surprisingly, to Natura 2000 woodland features, such as Western acidic oak woodland. However, other open habitats such as Dry heath, Blanket bog and a number of grasslands are also affected as there may be issues such as inappropriate historic planting or scrub encroachment from adjacent woodland and forestry. A number of species which rely on woodlands for foraging, such as Lesser horseshoe bat, may also be affected by woodland management practice.

Inappropriate or insufficient woodland management often leads to a lack of structural diversity and an even age structure. This is a concern on a number of woodland SACs such Gower Ash Woods, Blackmill Woodlands and Cwm Doethie-Mynydd Mallaen. Initial transformation thinning, the creation of canopy gaps and increasing the dead wood component can improve the condition of the woodland habitat. On other sites, like Coed y Cerrig, continuation of traditional woodland practices such as coppicing is important.

In the Wye Valley Woodlands and Coedwigoedd Dyffryn Elwy, for example, there is evidence that excessive levels of deer browsing and grazing is harming the woodland habitat features, and the impact is not restricted to the sites alone but can be found in the wider landscape. The spread of deer through the countryside puts other SACs at risk with both Sugar Loaf Woodlands and Alyn Valley Woods identifying deer browsing as a likely risk in the near future.

Upland SACs including Migneint–Arenig–Dduallt, Berwyn a Mynyddoedd De Clwyd and Elenydd-Mallaen have issues and risks associated with seeding conifer and broadleaved trees on to the open moorland. This causes deterioration of feature habitats, such as dry heath and blanket bog, with bog habitats being particularly vulnerable to rapid deterioration. Drying, cracking and oxidation can also be seen on wetland sites such as Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses where tree removal is required to restore the degraded raised bogs.

Welsh rivers such as the Afon Eden (Afon Eden - Cors Goch Trawsfynydd SAC), can be vulnerable to acidification due to high cover of conifers in the catchment that more effectively scavenge acid sulphur and nitrogen air pollutants than other vegetation types.⁷ Increased levels of siltation can also be caused by inappropriate plantation management. However, elsewhere (for example, the River Usk and River Wye) native broadleaved floodplain woodlands play an essential part within SAC river ecosystems. Appropriate management of such woodlands provides multiple biodiversity gains.

⁷ In some cases, these issues/risks are logged as 'Diffuse pollution' in the NRW Actions Database and so the figures for acidification and siltation are under-represented in this report.

5. Policy and legislative context

There is a broad framework of policy and legislation at the international, UK and Welsh level which drives and supports the management of Natura 2000. The primary European legislation is the Habitats Directive and the Birds Directive which promote the conservation and management of natural habitats and wild species. Key UK legislation includes the Habitats Regulations, Wildlife and Countryside Act, and the Countryside and Rights of Way Act. Wales is developing a new approach to integrated and sustainable natural resource management, through for example, the Environment (Wales) Bill and the Nature Recovery Plan. Further information is provided in the *LIFE Natura 2000 Programme Facts and Figures Report 1.*

Policy and legislation which specifically relates to the issue of woodland management is as follows:-

- Forestry Act 1967 (as amended) lays out the regulatory regime for felling, replanting and new woodland creation in the UK, and ensures that new forests and related operations do not harm the environment. There is a presumption against loss of tree cover, and the Act promotes a balanced set of objectives from our woodlands.
- UK Forestry Standard (UKFS) 2011 defines the UK Government's approach to sustainable forest management with seven supporting guidelines. It sets out the standards and requirements for regulation and monitoring, and is the basis for assessing woodland management proposals and what constitutes good forestry practice.

The UKFS is based upon the commitments made by the UK to a range of international agreements and conventions, and provides a framework for the delivery of forestry policies in England, Scotland, Wales and Northern Ireland. At the heart of the UKFS approach is the importance of balancing the environmental, economic and social benefits of forests.

- Woodlands for Wales 2009 sets out the Welsh Government's strategy for woodland and trees and forest policy in Wales. It is established around a foundation theme to deliver 'sustainable forest management' which is supported by four strategic themes seeking 20 outcomes to deliver a 50-year vision. Woodlands for Wales highlights the role of woodlands in making a positive contribution to biodiversity and reducing environmental pressures. The strategy also focuses on favourable management for our special sites. A series of eight policy positions provide further detail, and 5-year action plans are monitored through a set of Indicators.
- UK Woodland Assurance Standard This is the UK's independent standard for verifying that woodland products come from sustainably managed woodlands according to international forest certification schemes.
- Management of Wild Deer in Wales 2010 sets out the Welsh Government's framework for the sustainable management of wild deer in Wales together with an Action Plan to deliver the outcomes sought through collaborative action.

- Climate Change Strategy recognises the role of woodlands and trees in helping society adapt to climate change and outlines measures needed to make woodlands more resilient to predicted change. It highlights the ability of woodlands to sequester carbon and the scope to use timber (fibre) as a substitute for more energy intensive materials.
- Woodland Carbon Code a voluntary standard for UK woodland creation projects where claims are made about the carbon dioxide they sequester. Validation and verification to this standard provides assurance and clarity about the carbon savings of these sustainably managed woodlands with entry on the UK Woodland Carbon Code Registry.
- **Rural Development Plan for Wales** gives the Welsh Government the opportunity to support rural communities and businesses, and to ensure that natural resources are used sustainably. There is a focus on competitiveness (on farms and through the supply-chain), the environment (agri-environmental work, woodland, renewable energy) and community (access to services and the LEADER approach).

6. Current mechanisms and planned actions on sites to 2020

During 2014/15, the LIFE Natura 2000 Programme identified and costed actions to address issues/risks relating to inappropriate woodland management on Natura 2000 sites for the period to 2020. These actions are held in full in the NRW Actions Database and summarised in Prioritised Improvement Plans (PIPs). A total of 234 proposed actions were identified across the Natura 2000 series, with an estimated cost of nearly £4.7 million to 2020.

Actions expressed in terms of the delivery mechanism are shown below in Table 2. It shows the number of times mechanisms are identified against an action on a Natura 2000 site or management unit within a site and also specifies estimated costs and staff time. This includes high, medium and low priority actions; and incorporates those which are planned or underway.

Table 2. Mechanisms identified in the LIFE Natura 2000 Programme data to address issues and risks associated with inappropriate woodland management on Natura 2000 sites in Wales

Delivery mechanism	Total no of instances of mechanism	Total cost*	Total NRW staff days*
Direct management	111	£3,796,000	616
NRW management agreement	41	£589,000	222
Investigation	32	£38,000	294
Agri-environment management agreement (Glastir)	18	£152,000	36
Review of Forest Resource Plan	10	£121,000	711
Risk surveillance	6	£0	50
Felling licence	3	£12,000	7
Targeted education, awareness raising and liaison	3	£0	102
Compulsory withdraw/modify notice/consent	2	£0	2
Develop/review NRW policy and recommendations	2	£0	30
New deer management plan	1	£0	51

*The costs are broad estimated costs to deliver the action(s), rounded to the nearest thousand. In most cases the costs are calculated to 2020 except where longer term funding would be needed. The number of NRW staff days is the estimated number of annual staff days x 5 (for number of years until 2020) which would be needed, plus the number of one-off staff days until 2020. Note that there are a number of uncosted actions, due to the difficulty of estimating costs where more in depth action specific information is required.

The primary mechanisms used to address inappropriate woodland management on Natura 2000 sites in Wales are described in more detail below.

- **Direct management** generally refers to practical activities to implement agreed work programmes in woodlands owned or managed by voluntary bodies, local authorities or NRW. NRW managed land includes National Nature Reserves and the Welsh Government Woodland Estate.
- NRW Management Agreements are made with landowners to implement specific woodland or agricultural management within and/or adjacent to Natura 2000 sites with the aim of improving the condition of the features.
- Investigations are required if there is insufficient evidence to identify an appropriate action in a particular case. The investigation may establish the cause of unfavourable condition, the extent of the issue, or the best techniques or methodology to employ, for example.
- **Glastir Woodland** is as sustainable land management scheme run by Welsh Government, designed to support land managers who wish to create new woodland and/or manage existing woodlands. It aims to provide beneficial outcomes for a range of woodland types, species, soils and water. Glastir Woodland is part of the wider Glastir agri-environment scheme for Wales. Currently the scheme includes Glastir Woodland Creation, Glastir Woodland Restoration and Glastir Advanced.
- Forest Resource Plans refer to long-term forest management plans for the Welsh Government Woodland Estate.
- **Risk surveillance** involves monitoring for signs of a potential risk or so that action can be taken before it becomes an established issue.
- Felling Licences and associated replanting conditions are used where favourable management of Natura 2000 sites is reliant on controlled management of felling and/or replanting.

7. Rationale for strategic actions

The Natura 2000 actions identified in the Prioritised Improvement Plans and the Actions Database are predominantly site-based. While they can produce good results at a local level, they are limited in their ability to tackle broader factors, for example, the marketing of woodland products, financial support for woodland owners, managing deer populations at regional levels. Therefore, a set of strategic actions have been laid out in Section 9 of this plan.

Wales benefits from a comprehensive framework of strategic plans and policies in which relate to the conservation of woodlands. However, these are not always well understood or implemented by practitioners on the ground, and are not necessarily focused on Natura 2000. A number of the strategic actions seek to address this and make progress to integrate the needs of the Natura 2000 features into management policies, strategies and work programmes at relevant spatial scales.

The new actions will require collaborative working between Natural Resources Wales, the Welsh Government, private and third sector woodland organisations, landowners and managers to establish and deliver the management initiatives, programmes and project required.

8. Development of strategic actions

The strategic actions were developed through a process of consultation in combination with analysis of the LIFE Natura 2000 Programme data. Summary outputs of the data from Natura 2000 sites was used to provide contextual background for a woodland management workshop held in Aberystwyth on 2 March 2015. Attendees were specialists from Natural Resources Wales and Welsh Government with an expertise in woodland habitats and management practice.

Participants were asked to consider existing management methods for issues arising from woodland management and to identify new strategic actions which could address impacts regionally or at a Welsh or UK level. These suggestions were then reviewed by a small working group.

The draft strategic actions were made available for comment to a wider audience through a series of three workshops during the summer of 2015. The first workshop was open to sector leads from Welsh Government, while the second and third workshops (held on the 19 and 25 August 2015, in Garwnant and Bangor respectively) were attended by representatives of interested organisations in Wales, from, for example, the third sector, local authorities, farming unions and other user groups. There was a total of 84 attendees. The consultation drafts were also available to others unable to attend these events on request. The feedback received was reviewed and included in the actions as appropriate.

The strategic actions are intended to be SMART (Specific, Measurable, Assignable, Realistic and Time-related) and therefore information has been provided on costs and time-scales where possible. A proposed lead delivery organisation is listed against each action. The intention is that this organisation would drive the action forward, collaborating with other partners and stakeholders as necessary.

9. Strategic actions for Natura 2000 in Wales: Inappropriate Woodland Management

The following represent a list of proposed actions needed to make progress towards favourable condition of Natura 2000 features. They do not represent a fully funded or committed operational plan.

This plan refers to the issue/risk associated with woodland management of SACs woodlands and adjacent semi-natural woodlands. Other issues affecting woodland SAC sites, such as invasive non-native species, disease and pathogens, air pollution, access and recreation, are considered in the relevant Thematic Action Plan. Management of commercial forests which impacts upon nearby non-woodland N2K sites, through for example, diffuse pollution, siltation, or acidification of water courses is covered in the Diffuse Pollution Thematic Action Plan.

	Action	Detail	Priority	Link to existing work programmes/ potential funds	Proposed lead organisation	Proposed partner organisation(s)	Estimated cost (£)	Proposed timetable
1	Bring more woodland into appropriate and planned management through the promotion of markets for woodland products.	 Link landowners/woodland managers with markets. Review success/failures of previous niche market LEADER projects and Coed Cymru products. Promote the use of UKFS for woodland management. Investigate new niche markets. Develop woodland skills and supply of skilled contractors. Promote marketing of produce approach to landowners. Explore solutions to current market failures. 	High	Rural Development Plan Glastir Woodland Management Timber Business Investment Scheme NRW management agreements (S15/16/39)	Natural Resources Wales Welsh Government	Forest and third sector woodland organisations National Parks	Staff time and possible project costs TBC	2015 – ongoing
2	Create new semi-natural woodland to improve resilience of SAC features.	Woodland creation will primarily benefit SAC woodland habitats and bat features, particularly tackling habitat fragmentation issues. However, creation of woodland will help reduce other associated issues/risks such as climate change, air pollution, diffuse pollution, and access and recreation. In some cases, the benefits would be seen on non-woodland N2K sites, for example by increasing shade, and reducing pollution burdens on riverine SACs.	High	Rural Development Plan Glastir Woodland Creation NRW management agreements (S15/16/39) Woodland Carbon Code Environment and Sustainable Development Core/Project Funding Compensatory (mitigating loss) planting from development Area Statements	Natural Resources Wales Welsh Government	Forest and third sector woodland organisations Landowners and managers	Staff time and possible project costs TBC	2015 – ongoing
3	Promote favourable management of N2K sites and features on NRW- managed estate, including	Include N2K requirements from the SAC/SPA Core Management Plans and PIPs in development or review of relevant plans, including:-	High	Woodlands for Wales Action plan (Priority Action 10)	Natural Resources Wales	National Parks	Staff time and possible project costs TBC	2015 – ongoing

	 Welsh Government Woodland Estate National Nature Reserves Flood Risk Assets by reviewing relevant management and delivery plans to incorporate and prioritise N2K requirements. 	 Forest Resource Plans and Operational Delivery Plans National Nature Reserve management plans Woodlands for Wales Strategy Action Plan 						
4	Within Area Statements develop and promote an area-based woodland management framework and co- ordinated partnership approach to action. To include collaborative management activity between Welsh Government Woodland Estate and private landowners.	Relates to Rural Development Plan fund measure 16.4. Identify priority action areas on which to focus coordinated management, taking into account existing issues, risk and ownership (i.e. WG Woodland Estate as a hub). For example, develop better management of deer by working together in a defined area such as the Wye Valley or Elwy Catchment.	High	Rural Development Plan National Natural Resource Policy	Natural Resources Wales Welsh Government	Forestry sector and third sector woodland organisations Landowners and managers National Parks	Staff time and possible project costs TBC	2015- ongoing
5	Encourage appropriate management of woodland or plantations on land adjacent to N2K sites, where the woodland/plantation is having adverse effects on the N2K features.	Review and revise conservation objectives/ Core Management Plans/PIPs for N2K sites where the management of adjacent woodland is having an adverse effect on the site features. To include woodland SACs and SACs with open habitats (e.g. where seeding of trees into heathland is an issue). Ensure issues caused by adjacent woodland/plantation are addressed in these documents and conservation actions are updated/identified. Develop relevant guidance and standards relating to the protection of adjacent N2K	Medium	Rural Development Plan NRW management agreements (S15/16/39)	Natural Resources Wales Welsh Government	Forest and third sector woodland organisations Landowners and managers	Staff time and possible project costs TBC	2015- ongoing
		 sites, for the woodland/forestry sector on: Permitting Management options Tree species choice 						
6	Promote woodland management for positive outcomes for Section 42 species of principal importance for conservation, and adapt to ensure N2K features benefit.	Create guidance for Rural Development Plan scheme staff and woodland managers on the management of woodland for Section 42 species and link to benefits for N2K features.	Medium	Woodland for Wales Action plan Forest Resource Plans Operational Delivery Plans	Woodland Ecosystem Group Natural Resources Wales	Forest and third sector woodland organisations	Staff time and possible project costs TBC	2015- ongoing
7	Ensure N2K needs are fully integrated into current policy and programme framework (UKFS, UKWAS, WG policy, NRW programmes (e.g. for	Promote relevant measures for N2K within policies and programmes, and monitor progress towards objectives.	Medium	PAWS restoration Peat restoration	Natural Resources Wales Welsh Government	Forest and third sector woodland organisations	Staff time Programme costs TBC	2015- ongoing

	Planted Ancient Woodland Sites restoration).			Priority water action programmes for wooded catchments Woodlands for Wales Strategy action plan Operational Delivery Plans Rural Development Plan		Landowners and managers		
8	Glastir Woodlands: Promote and target the scheme to N2K landowners to increase uptake of entry level and relevant higher level prescriptions. Provide advice and support to applicants. Review Glastir Woodland prescriptions relating to grazing in woodlands and deer management.	 As part of the review of prescriptions examine the feasibility of introducing the following options:- Managed grazing such as 'pulse' grazing. Capital works for deer management. 	Medium	Glastir Woodland	Welsh Government Natural Resources Wales	Forest and third sector woodland organisations Landowners and managers	Staff time and possible project costs TBC	2015- ongoing
9	Implement the Management of Wild Deer in Wales strategy. Review the current action plan and set out activities to be undertaken over the next five years.		Medium	Wildlife management programme	Natural Resources Wales Welsh Government	The Deer Initiative Landowners Wales deer action plan delivery group	Staff time £30k/annum	2015 – ongoing
10	Create a website/web pages which provides information which links strategic actions with site-based actions.	To include, for example, links between NRW and WG web pages.	Low		Natural Resources Wales		Staff time	2015
11	Develop a training and educational resource(s) for landowners, to improve conservation woodland management knowledge, skills and techniques to achieve ecological benefits.	Target education resource to landowners to improve engagement and willingness to undertake appropriate management.	Low	Rural Development Plan funding	Natural Resources Wales	Forest and third sector woodland organisations National Parks	Staff time and possible project costs TBC	2015 – ongoing

Appendix A: Natura 2000 sites recorded as having woodland management as an issue or risk adversely affecting (or having the potential to adversely affect) features of that site

Data was derived from the NRW Actions Database following work by the LIFE Natura 2000 Programme. High, medium and low priority issues/risks are included. Instances may be recorded for the whole site or at a more detailed 'management unit' (sub-site) level.

Data from	September 2015
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		Number of instances site affected		
Site name		Unit	Site	
	SAC/SPA	level	level	Total
Afon Gwyrfai a Llyn Gwellyn	SAC	2	-	2
Alyn Valley Woods / Coedwigoedd Dyffryn Alun	SAC	14	1	15
Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains	SAC/SPA	4	-	4
Blackmill Woodlands	SAC	2	-	2
Cardiff Beech Woods	SAC	1	1	2
Carmarthen Bay Dunes / Twyni Bay Caerfyrddin	SAC	1	-	1
Coed Cwm Einion	SAC	1	-	1
Coed Y Cerrig	SAC	1	1	2
Coedwigoedd Dyffryn Elwy / Elwy Valley Woods	SAC	1	1	2
Coedwigoedd Penrhyn Creuddyn / Creuddyn Peninsula Woods	SAC	1	-	1
Coedydd a Cheunant Rheidol / Rheidol Woods and Gorge	SAC	2	-	2
Coedydd Aber	SAC	7	-	7
Coedydd Derw a Safleoedd Ystlumod Meirion /				
Meirionnydd Oakwoods and Bat	SAC	5	-	5
Coedydd Llawr-y-glyn	SAC	1	-	1
Coedydd Nedd a Mellte	SAC	1	1	2
Coetiroedd Cwm Elan / Elan Valley Woodlands	SAC	1	-	1
Cwm Clydach Woodlands / Coedydd Cwm Clydach	SAC	-	1	1
Cwm Doethie – Mynydd Mallaen	SAC	20	-	20
Deeside & Buckley Newt Sites	SAC	12	-	12
Elenydd-Mallaen	SAC/SPA	5	1	6
Eryri / Snowdonia	SAC	2	1	3
Fenn's, Whixall, Bettisfield, Wem and Cadney				
Mosses	SAC	21	-	21
Glannau Mon:Cors Heli / Anglesey Coast:Saltmarsh	SAC	1	-	1
Gower Ash Woods / Coedydd Ynn Gwyr	SAC	10	-	10
Granllyn	SAC	1	-	1
Great Ormes Head / Pen Y Gogarth	SAC	3	-	3
Gweunydd Blaencleddau	SAC	-	1	1

Johnstown Newt Sites	SAC	2	-	2
Llwyn	SAC	2	-	2
Migneint-Arenig-Dduallt	SAC/SPA	7	1	8
Morfa Harlech a Morfa Dyffryn	SAC	1	-	1
Mwyngloddiau Fforest Gwydir / Gwydyr Forest				
Mines	SAC	14	1	15
Mynydd Epynt	SAC		1	1
North Pembrokeshire Woodlands / Coedydd				
Gogledd Sir Benfro	SAC	7	-	7
Pembrokeshire Bat Sites and Bosherston Lakes /				
Safleoedd Ystlum Sir Benf	SAC	1	-	1
Pen Llyn ar Sarnau / Lleyn Peninsula and the Sarnau	SAC	-	1	1
Rhos Llawr-cwrt	SAC	1	-	1
River Usk/Afon Wysg	SAC	-	1	1
River Wye / Afon Gwy	SAC	-	1	1
Sugar Loaf Woodlands	SAC	5	1	6
Tanat and Vyrnwy Bat Sites / Safleoedd Ystlumod				
Tanat Ac Efyrnwy	SAC	-	1	1
Usk Bat Sites / Safloedd Ystlumod Wysg	SAC	-	1	1
Wye Valley Woodlands / Coetiroedd Dyffryn Gwy	SAC	21	2	23
Y Twyni o Abermenai i Aberffraw / Abermenai to				
Aberffraw Dunes	SAC	1	-	1
Total		182	20	202

Appendix B: Natura 2000 features adversely affected (or having the potential to be adversely affect) on Natura 2000 sites by inappropriate woodland management

Data was derived from the NRW Actions Database following work by the LIFE Natura 2000 Programme. High, medium and low priority issues/risks are included. Instances may be recorded for the whole site or at a more detailed 'management unit' (sub-site) level.

Data from September 2015

	Number of instances feature affected		
Feature (common name)	Unit	Site	Total
	level	level	
Western acidic oak woodland	57	2	59
Mixed woodland on base-rich soils associated with rocky slopes	47	6	53
Degraded raised bogs	21	-	21
Beech forests on neutral to rich soils	14	4	18
Dry heaths	14	2	16
Great crested newt	15	-	15
Grasslands on soils rich in heavy metals	14	1	15
Blanket bog	7	3	10
Yew-dominated woodland	5	2	7
Alluvial forests	4	2	6
Dry grasslands and scrublands or chalk or limestone	5	-	5
Red kite	4	1	5
Lesser horseshoe bat	1	4	5
Merlin	3	1	4
Atlantic salmon	2	2	4
Otter	2	2	4
Rivers with floating vegetation often dominated by water-			
crowfoot	2	2	4
Dunes with creeping willow	3	-	3
Humid dune slacks	3	-	3
Wet heathland with cross-leaved heath	0	3	3
Active raised bogs	2	-	2
Clear-water lakes or lochs with aquatic vegetation and poor to			
moderate nutrient levels	2	-	2
Dune grassland	2	-	2
Atlantic salt meadows	1	1	2
Estuaries	1	1	2
Glasswort and other annuals colonising mud and sand	1	1	2
Marsh fritillary butterfly	1	1	2
Petalwort	2	-	2
Barbastelle bat	1	-	1

Calcium-rich nutrient-poor lakes, lochs and pools	1	-	1
Peregrine	1	-	1
Shifting dunes with marram	1	-	1
Fen orchid	1	-	1
Calcium-rich springwater-fed fens	-	1	1
Allis shad	-	1	1
Twaite shad	-	1	1
Beech forests on acid soils	-	1	1
Bullhead	-	1	1
River lamprey	-	1	1
Brook lamprey	-	1	1
Purple moor-grass meadows	-	1	1
Intertidal mudflats and sandflats	-	1	1
Sea lamprey	-	1	1
Very wet mires often identified by an unstable 'quaking' surface	-	1	1