



## **European Site Conservation Objectives: Supplementary Advice on Conserving and Restoring Site Features**

**Kennet Valley Alderwoods Special Area of Conservation (SAC)  
Site code: UK0030175**



*Photo: Jonathan Russell*

**Date of Publication: 29 March 2016**

## **About this document**

This document provides Natural England's supplementary advice about the European Site Conservation Objectives relating to Kennet Valley Alderwoods SAC. This advice should therefore be read together with the SAC Conservation Objectives available [here](#).

You should use the Conservation Objectives, this Supplementary Advice and any case-specific advice given by Natural England, when developing, proposing or assessing an activity, plan or project that may affect this site. Any proposals or operations which may affect the site or its qualifying features should be designed so they do not adversely affect any of the attributes listed in the objectives and supplementary advice.

This supplementary advice to the Conservation Objectives describes in more detail the range of ecological attributes which are most likely to contribute to a site's overall integrity and the minimum targets each qualifying feature needs to achieve in order to meet the site's objectives.

The tables provided below bring together the findings of the best available scientific evidence relating to the site's qualifying features, which may be updated or supplemented in further publications from Natural England and other sources. The local evidence used in preparing this supplementary advice has been cited. The references to the national evidence used are available on request. Where evidence and references have not been indicated, Natural England has applied ecological knowledge and expert judgement. You may decide to use other additional sources of information.

In many cases, the attribute targets shown in the tables indicate whether the current objective is to 'maintain' or 'restore' the attribute. This is based on the best available information, including that gathered during monitoring of the feature's current condition. As new information on feature condition becomes available, this will be added so that the advice remains up to date.

The targets given for each attribute do not represent thresholds to assess the significance of any given impact in Habitats Regulations Assessments. You will need to assess this on a case-by-case basis using the most current information available.

Some, but not all, of these attributes can also be used for regular monitoring of the actual condition of the designated features. The attributes selected for monitoring the features, and the standards used to assess their condition, are listed in separate monitoring documents, which will be available from Natural England.

These tables do not give advice about SSSI features or other legally protected species which may also be present within the European Site.

**If you have any comments or queries about this Supplementary Advice document please contact your local Natural England adviser or email [HDIRConservationObjectivesNE@naturalengland.org.uk](mailto:HDIRConservationObjectivesNE@naturalengland.org.uk)**

## About this site

### European Site information

<b>Name of European Site</b>	Kennet Valley Alderwoods Special Area of Conservation (SAC)
<b>Location</b>	Berkshire
<b>Site Map</b>	The designated boundary of this site can be viewed <a href="#">here</a> on the MAGIC website
<b>Designation Date</b>	1 April 2005
<b>Qualifying Features</b>	See section below
<b>Designation Area</b>	56.77ha
<b>Designation Changes</b>	N/A
<b>Feature Condition Status</b>	Details of the feature condition assessments made at this site can be found using Natural England's <a href="#">Designated Sites System</a>
<b>Names of component Sites of Special Scientific Interest (SSSIs)</b>	Kennet Valley Alderwoods SSSI
<b>Relationship with other European or International Site designations</b>	N/A

### Site background and geography

Kennet Valley Alderwoods SAC is composed of two blocks of wet woodland situated on the floodplain of the River Kennet, a tributary of the River Thames, which rises in the Berkshire and Marlborough Downs.

These woodlands are the largest remaining fragments of damp, ash-alder woodland in the Kennet floodplain. They are situated on alluvial soils, overlain by a shallow layer of moderately calcareous peat through most of the woodland. The water table is relatively high, giving a range of soil moisture conditions from waterlogged to relatively dry.

The underlying geology of the catchment is chalk, which gives rise to strongly calcareous groundwater conditions. The alder woods are situated on a largely undeveloped section of the floodplain surrounded by grazed pastures. The woods include natural river valley features such as former river channels and seasonal ponds. These woods have a relatively natural structure with hydrological features typical of unmodified floodplains (although man-made features such as ditches and sluices are also evident). The woods are said to have a long history and may have originally been utilised as a source of charcoal.

In comparison with other examples of this habitat type in the national context, the Kennet Valley Alderwoods SAC is regarded as a particularly species-rich and relatively undisturbed example. It supports an unusually rich diversity of plants associated with this woodland type, and displays a complete transition from open water and swamp through to relatively dry woodland.

## About the qualifying features of the SAC

The following section gives you additional, site-specific information about this SAC's qualifying features. These are the natural habitats and/or species for which this SAC has been designated.

### Qualifying habitats:

- **H91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) ('alder woodland on floodplains').**

This habitat type comprises woods dominated by alder *Alnus glutinosa* and willow *Salix* spp. which are found along river floodplains in a range of situations, from islands in river channels to low-lying wetlands alongside the channels. The habitat typically occurs on moderately base-rich, eutrophic soils subject to periodic inundation.

Many such woods are dynamic, being part of a successional series of habitats. Their structure and function are best maintained within a larger unit that includes the open communities, mainly fen and swamp, of earlier successional stages. On the drier margins of these areas other tree species, notably ash *Fraxinus excelsior* and elm *Ulmus* spp., may become abundant. In other situations the alder woods occur as a stable component within transitions to surrounding dry-ground forest, sometimes including other Annex I woodland types. These transitions from wet to drier woodland and from open to more closed communities provide an important facet of ecological variation.

This SAC contains the largest fragments of relatively undisturbed alder-ash woodland on the floodplain of the River Kennet. The woods are situated on waterlogged alluvium overlain by a shallow layer of calcareous peat. Alder generally dominates the canopy but ash is frequent and there are smaller amounts of grey willow *Salix cinerea*, elm and oak *Quercus robur*. There is a sparse shrub layer which includes guelder rose *Viburnum opulus*, hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, dogwood *Thelycrania sanguinea* and hazel *Corylus avellana*. The ground flora varies in character in relation to wetness with a strong wetland component demonstrated by the occurrence of plants such as yellow flag iris *Iris pseudacorus*, water mint *Mentha aquatica*, redcurrant *Ribes rubrum*, hemlock water-dropwort *Oenanthe crocata*, remote sedge *Carex remota*, lesser pond-sedge *C. acutiformis*, opposite-leaved golden-saxifrage *Chrysosplenium oppositifolium* and reed *Phragmites australis*.

In drier areas is a base-rich woodland flora with much dog's mercury *Mercurialis perennis* and also herb-paris *Paris quadrifolia*. The occurrence of the latter is unusual, as it is more typically associated with ancient woodland, whereas the evidence suggests that these stands have largely developed more recently over the past century.

In terms of the National Vegetation Classification, this Annex I habitat feature comprises three woodland vegetation types; W6a *Alnus glutinosa/Urtica dioica* woodland, typical sub-community; W7b *Alnus glutinosa-Fraxinus excelsior-Lysimachia nemorum* woodland, *Carex remota-Cirsium palustre* sub-community and W8a *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland, *Glechoma hederacea-Primula vulgaris* sub-community (Rodwell, 1991).

### References

RODWELL, J.S. (ed.) 1991. *British Plant Communities. Volume 1. Woodlands and scrub*. Cambridge University Press.

**Table 1: Supplementary Advice for Qualifying Features: H91E0. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae); Alder woodland on floodplains\***

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
<b>Extent and distribution of the feature</b>	Extent of the feature within the site	Maintain the total extent of the H91EO feature at 57.7 hectares (allowing for changes resulting from natural processes).	<p>There should be no measurable reduction (excluding any trivial loss) in the extent and area of this feature, and in some cases, the full extent of the feature may need to be restored.</p> <p>The baseline-value of extent given includes existing open space and it is acknowledged that this is a valuable component of the site. Area measurements given are approximate as they are based on digitisation of map data. The extent of an Annex I habitat feature is the sum extent of all of the component vegetation communities present and includes transitions and mosaics with other closely-associated habitat features.</p> <p>Where a feature is susceptible to natural dynamic processes, there may be acceptable variations in its extent through natural fluctuations. Where a reduction in the extent of a feature is considered necessary to meet the Conservation Objective for another Annex I feature, Natural England will advise on this on a case-by-case basis.</p> <p>For this feature it should be noted that tree roots can extend a considerable distance beyond the boundary of the site and these can be impacted by adjacent activities.</p> <p>The loss of woodland area - whether at the edge or in the middle of a site - will reduce the core woodland area where woodland conditions are found and which support significant assemblages of species dependent on maintenance of the woodland canopy. Loss of tree cover which fragments a site into different parts poses a risk that species may be unable to move across the remaining parts of the woodland.</p>	WILSON, P.J & SMITH, J.E 2002. Kennet Valley Alderwoods NVC Survey. English Nature. Available on request.
	Spatial distribution of the feature within the site	Maintain the distribution and configuration of the H91EO feature, including where applicable its component vegetation types, across the site	<p>A contraction in the range, or geographic spread, of the feature (and its component vegetation and typical species, plus transitional communities) across the site will reduce its overall area, the local diversity and variations in its structure and composition, and may undermine its resilience to adapt to future environmental changes.</p> <p>This may also reduce and break up the continuity of a habitat within a site and how well its typical species are able to move around the site to occupy and</p>	



Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			use habitat. Such fragmentation can impact on the viability and the wider ecological composition of the Annex I habitat. Smaller fragments of habitat typically support smaller and more isolated populations which are more vulnerable to extinction. These fragments also have a greater amount of open, edge habitat which will differ in the amount of light, temperature, wind, and even noise that it receives compared to its interior. These conditions may not be suitable for some of the typical and more specialist species associated with the Annex I habitat feature.	
<b>Structure and function (including its typical species)</b>	Vegetation community composition	<p>Ensure the component vegetation communities of the H91EO feature are referable to and characterised by the following National Vegetation Classification type (s):</p> <p>W6a <i>Alnus glutinosa</i> - <i>Urtica dioica</i> woodland, typical sub-community;  W7b <i>Alnus glutinosa</i>-<i>Fraxinus excelsior</i>-<i>Lysimachia nemorum</i> woodland, <i>Carex remota</i>-<i>Cirsium palustre</i> sub-community;  W8a <i>Fraxinus excelsior</i>-<i>Acer campestre</i>-<i>Mercurialis perennis</i> woodland, <i>Glechoma hederacea</i>-<i>Primula vulgaris</i> sub-community.</p>	<p>This habitat feature is comprised of a number of associated semi-natural vegetation types and their transitional zones, reflecting the geographical location of the site, altitude, aspect, soil conditions (especially base-status and drainage) and probably also historical vegetation management. In the UK these have been categorised by the National Vegetation Classification (NVC).</p> <p>Maintaining or restoring these characteristic and distinctive vegetation types, and the range of types as appropriate, will be important to sustaining the overall habitat feature. This will also help to conserve their typical plant species (i.e. the constant and preferential species of a community), and therefore that of the SAC feature, at appropriate levels (recognising natural fluctuations).</p>	WILSON, P.J & SMITH, J.E 2002. Kennet Valley Alderwoods NVC Survey. English Nature. Available on request.
	Vegetation structure - canopy cover	Maintain an appropriate tree canopy cover across the H91EO feature, which will typically be between 60-90% of the site	<p>Canopy cover is the overall proportion of vegetative cover consisting of any woody layer, ranging from established regeneration to mature and veteran stages.</p> <p>Woodland canopy density and structure is important because it affects ecosystem function and in particular microclimate, litter-fall, soil moisture, nutrient turnover and shading; this in turn influences the composition of plants and animals in lower vegetation layers and soil. Open canopies with just scattered trees will have less of a woodland character and reduced diversity of woodland-dependent species. Completely closed canopies across the whole woodland are not ideal either however, as they cast heavier shade and support fewer species associated with edges, glades and open grown trees,</p>	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			and have little space where tree regeneration could occur. In general, the woodland canopy of this feature should provide a core of woodland interior conditions with some open and edge habitat as well.	
<b>Structure and function (including its typical species)</b>	Vegetation structure - open space	Maintain areas of permanent/temporary open space within the H91EO woodland feature, typically to cover approximately 10% of area	Woodland structure includes variations in age, tree form, layering, the distribution and abundance of open space and dead wood. It plays a critical role in woodland ecosystem functioning.  Having some open, sunlit and largely tree-less areas as part of the woodland community is often important to facilitate natural tree and shrub regeneration and also to provide supporting habitat for specialist woodland invertebrates, birds, vascular and lower plants. Such open space can be permanent or temporary and may consist of linear rides and glades, or naturally-produced gaps caused by disturbance events such as wind-throw.	
	Vegetation structure - old growth	Maintain the extent and continuity of undisturbed, mature/old growth stands (typically comprising at least 20% of the H91EO feature at any one time).	Natural woodland structure includes variations in age, tree form, layering, the distribution and abundance of open space and dead wood. It plays a critical role in woodland ecosystem functioning.  This is intended to indicate the desirability of promoting natural processes in at least a proportion of the woodland, whilst accommodating management which is compatible with or furthers its nature conservation value.	
	Vegetation structure - dead wood	Maintain the continuity and abundance of standing or fallen dead and decaying wood (typically between 30 - 50 m <sup>3</sup> per hectare of standing or fallen timber or 3-5 fallen trees >30cm per hectare, and >10 standing dead trees per hectare)	Dead and actively decaying wood, either as part of a standing tree or as a fallen tree on the woodland floor, is an important component of woodland ecosystems, and supports a range of specialist invertebrates, fungi, lichens and bryophytes, and associated hole-nesting birds and roosting bats, all of which are typical of the feature.  The target is intended to indicate the desirability of maintaining this aspect, whilst recognising that parts of the woodland may have lower representation of dead wood as a result of management such as coppicing.	
<b>Structure and function (including its typical species)</b>	Vegetation structure - age class distribution	Maintain at least 3 age classes (pole stage/ medium/ mature) spread across the average life expectancy of the canopy trees.	Natural woodland structure is usually characterised by a wide variation in age class of canopy trees. A distribution of size and age classes of the major site-native tree and shrub species that indicate the woodland will continue in perpetuity and provide a variety of natural woodland habitat niches is desirable.  The target is intended to indicate the desirability of promotion of natural processes, not necessarily that active intervention may be necessary to meet this objective.	
<b>Structure and</b>	Vegetation	Maintain an understorey of	Natural woodlands are often characterised by a varied understorey of shrubs	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
function (including its typical species)	structure - shrub layer	shrubs covering 10 - 60% of the stand area	<p>and young trees.</p> <p>A particular structural feature of the Kennet Valley Alderwoods is the presence of a diverse shrub layer, comprising young ash, hazel, grey willow, hawthorn, guelder rose, dogwood, field rose, elm, redcurrant etc. It is desirable that this aspect is maintained, although it is acknowledged that the composition and cover of the shrub layer will vary over time in response to water levels, light availability and other factors.</p>	
	Adaptation and resilience	Maintain the resilience of the H91EO feature by ensuring a diversity (at least 3 species) of dominant site-native trees (e.g. alder, willow <i>Salix</i> spp, ash and elm <i>Ulmus</i> spp.) across the site.	<p>This recognises the increasing need of natural habitat features to absorb or adapt to wider environmental changes. Resilience may be described as the ability of an ecological system to cope with, and adapt to environmental stress and change whilst retaining the same basic structure and ways of functioning. Such environmental changes may include changes in precipitation and temperature for example, which are likely to affect the extent, distribution, composition and functioning of a feature within a site.</p> <p>Using best available information, any necessary or likely adaptation or adjustment by the feature and its management in response to actual or expected climatic change should be allowed for, as far as practicable, in order to ensure the feature's long-term viability.</p> <p>The overall vulnerability of this particular SAC to climate change has been assessed by Natural England as being <i>moderate</i>, taking into account the sensitivity, fragmentation, topography and management of its habitats. This means that some adaptation action for specific issues may be required, such as reducing habitat fragmentation, creating more habitat to buffer the site or expand the habitat into more varied landscapes and addressing particular management and condition issues. Individual species may be more or less vulnerable than their habitat itself. In many cases, change will be inevitable so appropriate monitoring would be required.</p>	<p>NATURAL ENGLAND, 2015. Climate Change Theme Plan and National Biodiversity Climate Change Vulnerability Assessments. Available at <a href="http://publications.naturalengland.org.uk/publication/4954594591375360">http://publications.naturalengland.org.uk/publication/4954594591375360</a></p>
	Browsing and grazing by herbivores	Maintain browsing at a level that is compatible with the long-term maintenance of the woodland with no evidence of significant adverse impacts on tree regeneration, ground flora composition or understorey structure.	<p>Herbivores, especially deer, are an integral part of English woodland ecosystems. They are important in influencing woodland regeneration, composition and structure and therefore in shaping woodland wildlife communities.</p> <p>In general, both light grazing and browsing are desirable to promote both a diverse woodland structure and continuous seedling establishment. Short periods with no grazing at all can allow fresh natural regeneration of trees, but a long-term absence of herbivores can result in excessively dense thickets of</p>	



Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			young trees which shade out ground flora and lower plant species. However, heavy grazing by deer or other herbivores may prevent tree regeneration, and can cause excessive trampling and/or poaching damage, canopy fragmentation, bark damage and undesirable changes in ground flora composition.	
<b>Structure and function (including its typical species)</b>	Regeneration potential	Maintain sufficient natural regeneration of characteristic trees and shrubs to maintain canopy cover, typically tree seedlings of desirable species (measured by seedlings and <1.3m saplings - above grazing and browsing height) should be visible in sufficient numbers in gaps, at the wood edge and/or as re-growth as appropriate	The regeneration potential of the woodland feature must be maintained if the wood is to be sustained and survive, both in terms of quantity of regeneration and in terms of appropriate species. This will include regeneration of the trees and shrubs from saplings or suckers, re-growth from coppice stools or pollards, and where appropriate planting. It does not include establishment of undesirable species such as sycamore, Norway maple, horse chestnut, yew and other conifers.	
	Tree and shrub species composition	Maintain a canopy and understorey of which 95% is composed of site native trees and shrubs	Native trees and shrubs in general support a greater diversity of associated species than non-native species, especially amongst groups of invertebrates which depend directly on trees for food and shelter. There are many plants and animals which use or co-exist with non-native trees, but many rare and threatened woodland species are specialists adapted to one or a few native trees or shrub species (birches, willows and oaks are examples of trees that host many specialist insect species).	
	Key structural, influential and distinctive species	Maintain the abundance of the species listed below to enable each of them to be a viable component of the H91E0 habitat feature:  Higher plants; Alder <i>Alnus glutinosa</i> , Ash <i>Fraxinus excelsior</i> Aspen <i>Populus tremula</i> , Oak <i>Quercus robur</i> , willows <i>Salix spp</i> Sedges <i>Carex spp.</i> Reed <i>Phragmites australis</i> ; Marsh marigold <i>Caltha palustris</i> Wavy bitter-cress <i>Cardamine flexuosa</i> ; Opposite-leaved	Some plant or animal species (or related groups of such species) make a particularly important contribution to the structure, function and/or quality of an Annex I habitat feature at a particular site. These species will include; <ul style="list-style-type: none"> <li>- Structural species which form a key part of the habitat's structure or help to define an Annex I habitat on a site (see also the attribute for 'vegetation community composition').</li> <li>- Influential species which are likely to have a key role affecting the structure and function of the habitat (such as bioturbators (mixers of soil/sediment), grazers, surface borers, predators or other species with a significant functional role linked to the habitat).</li> <li>- Site-distinctive species which are considered to be a particularly special and distinguishing component of an Annex I habitat on a particular site.</li> </ul>	WILSON, P.J & SMITH, J.E 2002. Kennet Valley Alderwoods NVC Survey. English Nature. Available on request.  PORLEY, R. AND STEVEN, G. 1994. River Kennet Floodplain: Alder Woodland at The Wilderness and Speen Moor.

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		<p>golden- saxifrage <i>Chrysosplenium oppositifolium</i> Narrow buckler-fern <i>Dryopteris carthusiana</i>; Twayblade <i>Listera ovata</i>; Ragged robin <i>Lychnis flos-cuculi</i>; Dog's mercury <i>Mercurialis perennis</i>; Hemlock water-dropwort <i>Oenanthe crocata</i>; Herb paris <i>Paris quadrifolia</i> Solomon's seal <i>Polygonatum multiflorum</i></p> <p>Assemblage of woodland bryophytes including <i>Aulacomnium androgynum</i>; <i>Cirriphyllum crassinervum</i>; <i>Climacium dendroides</i>; <i>Eurhynchium praelongum</i>; <i>Fissidens bryoides</i> <i>Metzgeria furcata</i>; <i>Plagiomnium undulatum</i></p>	<p>There may be natural fluctuations in the frequency and cover of each of these species. The relative contribution made by them to the overall ecological integrity of a site may vary, and Natural England will provide bespoke advice on this as necessary.</p> <p>The list of species given here for this Annex I habitat feature at this SAC is not necessarily exhaustive. The list may evolve, and species may be added or deleted, as new information about this site becomes available.</p>	Unpublished English Nature report. Available on request.
<b>Structure and function (including its typical species)</b>	Invasive, non-native and/or introduced species	Ensure invasive and introduced non-native species are either rare or absent, but if present are causing minimal damage to the H91E0 feature	<p>Invasive or introduced non-native species are a serious potential threat to the biodiversity of native and ancient woods, because they are able to exclude, damage or suppress the growth of native tree, shrub and ground species (and their associated typical species), reduce structural diversity and prevent the natural regeneration of characteristic site-native species.</p> <p>Once established, the measures to control such species may also impact negatively on the features of interest (eg use of broad spectrum pesticides). Such species can include <i>Rhododendron</i>, snowberry, Japanese knotweed, giant hogweed and Himalayan balsam. Similarly, this would include pheasants and non-native invertebrate 'pest' species.</p>	
	Soils, substrate and nutrient cycling	Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the H91E0 habitat.	Soil is the foundation of basic ecosystem function and a vital part of the natural environment. Its properties strongly influence the colonisation, growth and distribution of those plant species which together form vegetation types, and therefore provides a habitat used by a wide range of organisms. Soil biodiversity has a vital role to recycle organic matter. Changes to natural soil properties may therefore affect the ecological structure, function and processes associated with this Annex I feature.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
<b>Supporting processes (on which the feature relies)</b>	Water quality/ quantity	Where the feature is dependent on surface water and/or groundwater, maintain water quality and quantity to a standard which provides the necessary conditions to support the H91E0 feature.	<p>This type of woodland is critically dependent on surface and ground water supply. The woods are characterised by their permanently-high water table, periodic flooding and standing open water in channels and pools. Maintaining the quality and quantity of water supply will be critical, especially at certain times of year.</p> <p>Poor water quality and inadequate quantities of water can adversely affect the structure and function of this habitat type. Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC.</p>	WARD, D. 2001. Water Level Management Plan for Kennet Valley Alderwoods SSSI. Environment Agency
	Hydrology	At a site, unit and/or catchment level as necessary, maintain the natural hydrological processes to provide the conditions necessary to sustain the H91E0 feature	<p>Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature. Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for the assemblage of characteristic plants and animals present.</p> <p>Floodplain forests such as the H91E0 feature are typically dynamic in nature, being subject to natural fluvial processes and often form local transitions to drier woodlands. Hydrological processes (including periodic inundation) are critical to how they function and must not be negatively impacted.</p>	
	Functional connectivity with wider landscape	Maintain the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection with the site	<p>This recognises the importance of maintaining connectivity of the site to its wider landscape in order to meet the conservation objectives.</p> <p>These connections may take the form of landscape features such as habitat patches, hedges, river banks and watercourses, outside of the designated site boundary which are important for the migration, dispersal and genetic exchange of those typical species closely associated with the alder woodland feature.</p> <p>This connectivity may also be important to the operation of the supporting ecological processes on which the designated site and its features may rely. In most cases increasing actual and functional landscape-scale connectivity would be beneficial. Where there is a lack of detailed knowledge of the connectivity requirements of the qualifying feature, Natural England will advise as to whether these are applicable on a case by case basis.</p>	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
	Illumination	Ensure artificial light is maintained at a level which is unlikely to affect natural phenological cycles and processes to the detriment of the H91E0 feature and its typical species at this site.	Woodland biodiversity has naturally evolved with natural patterns of light and darkness, so disturbance or modification of those patterns can influence numerous aspects of plant and animal behaviour. For example, light pollution (from direct glare, chronically increased illumination and/or temporary, unexpected fluctuations in lighting) can affect animal navigation, competitive interactions, predator-prey relations, and animal physiology. Flowering and development of trees and plants can also be modified by un-natural illumination which can disrupt natural seasonal responses.	
<b>Supporting processes (on which the feature relies)</b>	Conservation measures	Maintain the management measures (either within and/or outside the site boundary as appropriate) which are necessary to restore the structure, functions and supporting processes associated with the H91E0 feature	<p>Active and ongoing conservation management is needed to protect, maintain or restore this feature at this site. Further details about the necessary conservation measures for this site can be provided by contacting Natural England.</p> <p>This information will typically be found within, where applicable, supporting documents such as Natura 2000 Site Improvement Plan, Site Management Strategies or Plans, the Views about Management Statement for the underpinning SSSI and/or management agreements.</p>	<p>NATURAL ENGLAND, 2014. Kennet Valley Alderwoods Site Improvement Plan (SIP113). Available: <a href="http://publications.naturalengland.org.uk/publication/5578853737037824">http://publications.naturalengland.org.uk/publication/5578853737037824</a></p> <p>NATURAL ENGLAND, 2005. Views About Management A statement of English Nature's views about the management of Kennet Valley Alderwoods (SSSI). Available: <a href="http://www.sssi.naturalengland.org.uk/Special/sssi/vam/VAM%202000123.pdf">http://www.sssi.naturalengland.org.uk/Special/sssi/vam/VAM%202000123.pdf</a></p>
<b>Version Control</b>				
Advice last updated: N/A				
<b>Variations from national feature-framework of integrity-guidance:</b> N/A				