European Site Conservation Objectives: Supplementary advice on conserving and restoring site features

Sandlings Special Protection Area (SPA)
Site code: UK9020286

Dry heath and forest habitat © Natural England

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About this document

This document provides Natural England's supplementary advice for the European Site Conservation Objectives relating to Sandlings SPA. This advice should therefore be read together with the SPA Conservation Objectives available here.

This advice replaces a draft version dated 12 December 2018 following the receipt of comments from the site's stakeholders.

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.

This Supplementary Advice to the Conservation Objectives presents attributes which are ecological characteristics of the designated species and habitats within a site. The listed attributes are considered to be those that best describe the site's ecological integrity and which, if safeguarded, will enable achievement of the Conservation Objectives. Each attribute has a target which is either quantified or qualitative depending on the available evidence. The target identifies as far as possible the desired state to be achieved for the attribute.

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

About this site

European Site information

Name of European Site	Sandlings Special Protection Area (SPA)
Location	Suffolk
Site Map	The designated boundary of this site can be viewed here on the MAGIC website
Designation Date	10 August 2001
Qualifying Features	See section below
Designation Area	3,391.80 ha
Designation Changes	n/a
Feature Condition Status	Details of the feature condition assessments made at this site can be found using Natural England's Designated Sites System
Names of component Sites of Special Scientific Interest (SSSIs)	All or parts of Blaxhall Heath SSSI Leiston - Aldeburgh SSSI Sandlings Forest SSSI Snape Warren SSSI Sutton and Hollesley Heaths SSSI Tunstall Common SSSI
Relationship with other European or International Site designations	n/a

Site background and geography

The Sandlings SPA lies near the Suffolk Coast between the Deben Estuary and Leiston. It lies within the Suffolk Coast and Heaths National Character Area (NCA) a mainly flat or gently rolling landscape that forms a long, narrow band extending between 10 and 20 km inland. It is often open land but with few commanding viewpoints. In many places, and especially near the coast, wildlife habitats and landscape features lie in an intimate mosaic, providing great diversity in a small area. Much of the NCA forms part of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB).

In the 19th century, the area covered by the SPA was dominated by heathland developed on glacial sandy soils. During the 20th century, large areas of heath were planted with blocks of commercial conifer forest and others were converted to arable agriculture.

Lack of traditional management has resulted in the remnant areas of heath being subject to successional changes, with the consequent spread of bracken, shrubs and trees, although recent conservation management work is resulting in their restoration. The heaths support both acid grassland and heather-dominated plant communities, with dependant invertebrate and bird communities of conservation value. Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* have also adapted to breeding in the large conifer forest blocks, using areas that have recently been felled and recent plantation, as well as areas managed as open ground.

About the qualifying features of the SPA

The following section gives you additional, site-specific information about this SPA's qualifying features. These are the individual species of wild birds listed on Annex I of the European Wild Birds Directive, and/or the individual regularly-occurring migratory species, and/or the assemblages (groups of different species occurring together) of wild birds for which the SPA was classified for.

Qualifying individual species listed in Annex I of the Wild Birds Directive

The site qualifies for SPA classification as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I during the breeding season:

Annex 1 species	**Count at classification in 2001**	**% of GB population**	**Latest count**
Nightjar *Caprimulgus europaeus*	109 breeding males (1992)	3.2% GB	81 breeding males (2004)
Woodlark *Lullula arborea*	154 breeding pairs (1997)	10.3% GB	73 breeding pairs (2006)

Woodlark and nightjar utilise the open grassland and heather heaths for breeding. In recent times they have taken to nesting within open habitat associated with the system of rotational clear-felling within the conifer plantations, where areas of clear-fell and restocked plantation also provides ideal breeding conditions. Outside the confines of the forest nightjar and woodlark use both grasslands, arable land and other habitats for feeding.

Bird figures from:

MORRIS, A., BURGES, D., FULLER, R.J., EVANS, A.D. & SMITH, K.W. 1994. The status and distribution of nightjars *Caprimulgus europaeus* in Britain in 1992. A report to the British Trust for Ornithology. *Bird Study* **41**: 181- 191.

WOTTON, S.R. & GILLINGS, S. 2000. The status of breeding woodlarks in Britain in 1997. *Bird Study* **47**:212-224.

CONWAY, G.J., WOTTON, S., HENDERSON, I., LANGSTON, R., DREWITT, A. & CURRIE, F. 2007. Status and distribution of European Nightjars *Caprimulgus europaeus* in the UK in 2004. *Bird Study* **54**: 98–111.

CONWAY, G.J., WOTTON, S., HENDERSON, I., EATON, M., DREWITT, A. & SPENCER, J. 2009. The status of breeding Woodlarks *Lullula arborea* in Britain in 2006. *Bird Study* **56**: 310–325.

Site-specific seasonality of qualifying SPA features

The table below highlights in grey those months in which significant numbers of each mobile qualifying feature are most likely to be present at the SPA during a typical calendar year. This table is provided as a general guide only.

Unless otherwise indicated, the months shown below are primarily based on information relating to the general months of occurrence of the feature in the UK. Where site-based evidence is available and has been used to indicate below that significant numbers of the feature are typically present at this SPA outside of the general period, the site-specific references have been added to indicate this.

Applicants considering projects and plans scheduled in the periods highlighted in grey would benefit from early consultation with Natural England given the greater scope for there to be likely significant effects that require consideration of mitigation to minimise impacts to qualifying bird features during the principal periods of site usage by those features. The months which are *not* highlighted in grey are not ones in which the features are necessarily absent, rather that features may be present in less significant numbers in typical years. Furthermore, in any given year, features may occur in significant numbers in months in which typically they do not. Thus, applicants should not conclude that projects or plans scheduled in months not highlighted in grey cannot have a significant effect on the features. There may be a lower likelihood of significant effects in those months which nonetheless will also require prior consideration.

Any assessment of potential impacts on the features must be based on up-to-date count data and take account of population trends evident from these data and any other available information. Additional site-based surveys may be required.

Feature	Season	Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Site-specific references where available
Nightjar	Breeding	Summer													*n/a*
Woodlark	Breeding	Summer													*n/a*

Guide to terms:
Breeding – present on a site during the normal breeding period for that species
Non-breeding - present on a site outside of the normal breeding period for that species (includes passage and winter periods).
Summer – the period generally from April to July inclusive
Passage - the periods during the autumn and spring when migratory birds are moving between breeding areas and wintering areas. These periods are not strictly defined but generally include the months of July – October inclusive (autumn passage) and March – April inclusive (spring passage).
Winter - the period generally from November to February inclusive.

Table 1: Supplementary Advice for Qualifying Features: A224. *Caprimulgus europaeus*; European nightjar (Breeding)

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Breeding population (within the SPA)	**Population abundance**	Restore the size of the breeding Nightjar population to a level which is consistently above 109 males, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent.	This will sustain the site's population and ensures it contributes to a viable local, national and bio-geographic population. Due to the mobility of birds and the dynamic nature of population change, the target-value given for the abundance of this feature is considered to be the minimum standard for conservation/restoration measures to achieve. This minimum-value may be revised where there is evidence to show that a population's size has significantly changed as a result of natural factors or management measures and has been stable at or above a new level over a considerable period. The values given here may also be updated in future to reflect any strategic objectives which may be set at a national level for this feature. Given the likely fluctuations in numbers over time, any impact-assessments should focus on the current abundance of the site's population, as derived from the latest known or estimated level established using the best available data. This advice accords with the obligation to avoid deterioration of the site or significant disturbance of the species for which the site is classified, and seeks to avoid plans or projects that may affect the site giving rise to the risk of deterioration. Similarly, where there is evidence to show that a feature has historically been more abundant than the stated minimum target and its current level, the ongoing capacity of the site to accommodate the feature at such higher levels in future should also be taken into account. Maintaining or restoring bird abundance depends on the suitability of the site. However, factors affecting suitability can also determine other demographic rates of birds using the site including survival (dependent on factors such as body condition which influences the ability to breed or make foraging and / or migration movements) and breeding productivity. Adverse anthropogenic impacts on either of these rates may precede changes in population abundance (e.g. by changing proportions of birds of different ages) but eventually may negatively affect abundance. These rates can be measured/estimated to inform judgements of likely impacts on abundance targets. As a migratory species, population abundance may also be influenced by factors on wintering grounds and migratory routes outside of the United Kingdom.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			Unless otherwise stated, the population size will be that measured using standard methods such as peak mean counts or breeding surveys. This value is also provided recognising there will be inherent variability as a result of natural fluctuations and margins of error during data collection. Whilst we will endeavour to keep these values as up to date as possible, local Natural England staff can advise on whether the figures stated are the best available. The population objective is under review due to the unusual conditions in Sandlings Forest following the 1987 gale that felled most of the trees, leading the creation of a larger than normal area of optimum open habitat which supported a peak in ground-nesting bird numbers. A more realistic population target is currently being modelled, and this document will be updated when this has been agreed.	
Supporting habitat (both within and outside the SPA): disturbance	**Minimising disturbance caused by human activity**	Reduce the frequency, duration and/or intensity of disturbance affecting nesting, roosting, foraging or feeding Nightjars so that the population is not significantly disturbed.	The nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level that may substantially affect their behaviour, and consequently affect the long-term viability of the population. Such disturbing effects can for example result in changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, abandonment of nest sites and desertion of supporting habitat (both within or outside the designated site boundary where appropriate). This may undermine successful nesting, rearing, feeding and/or roosting, and/or may reduce the availability of suitable habitat as birds are displaced and their distribution within the site contracts. Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals and structures. This may become more of an issue as the population recovers and if an increase in development locally leads to an increase in recreational pressure in the Sandlings.	
Supporting habitat (both within and outside the SPA): extent and distribution	**Extent and distribution of supporting breeding habitat**	Restore the extent, distribution and availability of suitable breeding habitat which supports Nightjar for all the necessary stages of its breeding cycle (courtship, nesting, feeding)	Conserving or restoring the extent of supporting habitats and their range will be key to maintaining the site's ability and capacity to support the SPA population. The information available on the extent and distribution of supporting habitat used by the feature may be approximate depending to the nature, age and accuracy of data collection. This target will apply to any supporting habitat which is known to occur	FORESTRY COMMISSION, 2008. Rendlesham. Forest Design Plan FORESTRY COMMISSION, 2007.

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			outside the site boundary. The overall area of suitable habitat with the correct vegetation characteristics for nesting and feeding should be maintained, although the distribution will vary as areas of plantation mature or are felled.	Tunstall Forest Design Plan.
Supporting habitat (both within and outside the SPA): function/ supporting process	**Connectivity with supporting habitats**	Restore the safe passage of Nightjars moving between nesting and feeding areas.	The ability of the feature to safely and successfully move between feeding and nesting areas using flight-lines and movement routes is critical to their breeding success and to adult fitness and survival. This target will apply within the site boundary and where birds regularly move to and from off-site habitat where this is relevant. The foraging range of nightjar is known to extend up to several kilometres from their nest sites. Restoring the habitat within the SPA will increase the availability and suitability for the interest features, contributing to the recovery of the population.	
Supporting habitat (both within and outside the SPA): function/ supporting process	**Conservation measures**	Restore management or other measures (whether within and/or outside the site boundary as appropriate) necessary to restore the structure, function and/or the supporting processes associated with breeding Nightjar and its supporting habitats.	Active and ongoing conservation management is often needed to protect, maintain or restore this feature at this site. Other measures may also be required, and in some cases, these measures may apply to areas outside of the designated site boundary in order to achieve this target. Further details about the necessary conservation measures for this site can be provided by Natural England. 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. Measures are needed to provide sufficient habitat to support target population.	FORESTRY COMMISSION, 2008. Rendlesham. Forest Design Plan. FORESTRY COMMISSION, 2007. Tunstall Forest Design Plan. NATURAL ENGLAND, 2015. Site Improvement Plan: Sandlings (SIP210). ENGLISH NATURE, 2005. Views about the management of Sandlings Forest SSSI.
Supporting habitat	**Food availability**	Maintain or restore the distribution, abundance and	The availability of an abundant food supply is critically important for successful breeding, adult fitness and survival and the overall	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
(both within and outside the SPA): function/ supporting process	**within supporting habitat**	availability of key prey items (e.g. moths, beetles) at prey sizes preferred by Nightjars.	sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of prey may adversely affect the population.	
Supporting habitat (both within and outside the SPA): structure	**Landscape**	Restore the amount of open and unobstructed patches within nesting and foraging areas, including areas of clear-fell, windfall, wide tracks, open forest and heath.	This feature is known to favour large areas of open terrain, largely free of obstructions, in and around its nesting, roosting and feeding areas. Often there is a need to maintain an unobstructed line of sight within nesting, feeding or roosting habitat to detect approaching predators, or to ensure visibility of displaying behaviour. An open landscape may also be required to facilitate movement of birds between the SPA and any off-site supporting habitat. Restoring the habitat within the SPA will increase the availability and suitability for the interest features, contributing to the recovery of the population.	
Supporting habitat (within the SPA): function/ supporting process	**Air quality**	Restore as necessary the concentrations and deposition of air pollutants to below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).	The structure and function of the habitats which support this SPA feature may be sensitive to changes in air quality. Exceeding critical values for air pollutants may result in changes to the chemical status of its habitat substrate, accelerating or damaging plant growth, altering vegetation structure and composition and thereby affecting the quality and availability of nesting, feeding or roosting habitats. Critical Loads and Levels are thresholds below which such harmful effects on sensitive UK habitats will not occur to a noteworthy level, according to current levels of scientific understanding. There are critical levels for ammonia (NH3), oxides of nitrogen (NOx) and sulphur dioxide (SO2), and critical loads for nutrient nitrogen deposition and acid deposition. It is recognised that achieving this target may be subject to the development, availability and effectiveness of abatement technology and measures to tackle diffuse air pollution, within realistic timescales. There are currently no critical loads or levels for other pollutants such as Halogens, Heavy Metals, POPs, VOCs or Dusts. These should be considered as appropriate on a case-by-case basis. Ground level ozone is regionally important as a toxic air pollutant but flux-based critical levels for the protection of semi-natural habitats are still under development.	More information about site-relevant Critical Loads and Levels for this SPA is available by using the 'search by site' tool on the Air Pollution Information System (www.apis.ac.uk).

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			The critical loads for nitrogen deposition are currently being exceeded for some supporting habitat (November 2018)	
Supporting habitat (within the SPA): predation	**Predation**	Reduce the predation and disturbance of breeding Nightjar caused by native and non-native predators.	This will ensure that breeding productivity (number of chicks per pair) and survival are sustained at rates that maintain or restore the abundance of the feature. Impacts to breeding productivity can result directly from predation of eggs, chicks, juveniles and adults, and also from significant disturbance. The presence of predators can influence bird behaviours, such as abandonment of nest sites or reduction of effective feeding. Where evidence suggests predator management is required, measures can include their exclusion through fencing and scaring or by direct control. Any such measures must consider the legal protection of some predators, as well as the likely effects of such control on other qualifying features. Predation is not considered to be a problem at present, but this may change as the population recovers.	
Supporting habitat (within the SPA): structure	**Vegetation characteristics**	Restore the mix of vegetation (optimal conditions normally with vegetation mostly of 20-60 cm with frequent bare patches of >2 m2, 10-20% bare ground and <50% tree/scrub cover overall; trees <2 m in height) throughout the nesting area.	The height, cover, variation and composition of vegetation are often important characteristics of habitats supporting this feature which enable successful nesting/rearing/concealment/roosting. Many bird species will have specific requirements that conservation measures will aim to maintain, for others such requirements will be less clear. Activities that may directly or indirectly affect the vegetation of supporting habitats and modify these characteristics may adversely affect the feature. Restoring the habitat within the SPA will increase the availability and suitability for the interest features, contributing to the recovery of the population.	
Supporting habitat: function/ supporting process	**Adaptation and resilience**	Maintain the ability of the feature's supporting habitats to adapt or evolve to wider environmental change, either within or external to the site	This recognises the increasing likelihood of natural habitat features needing 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 sea levels, precipitation and temperature for example, which are likely to affect the	NATURAL ENGLAND, 2015. Climate Change Theme Plan and supporting NBCCV Assessments for SACs and SPAs [both available at http://publications.natur

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			extent, distribution, composition and functioning of a feature within a site. Achieving resilience in forest habitats may require changes in tree species composition and silvicultural methods. The vulnerability and response of features to such changes will vary. The overall vulnerability of this SPA to climate change has been assessed by Natural England as being low, taking into account the sensitivity, fragmentation, topography and management of its habitats. These sites are considered to be vulnerable overall but are a lower priority for further assessment and action. Individual species may be more or less vulnerable than their supporting habitat itself. In many cases, change will be inevitable so appropriate monitoring would be required. 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.	alengland.org.uk/publication/4954594591375360].
Version Control Advice last updated: **1 March 2019** Extent / distribution of supporting habitat: additional text to reflect that area of habitat may be maintained but distribution may vary across the site Population abundance: additional text to clarify the unusual conditions in the Sandlings Forest which influenced the current baseline population levels.				
Variations from national feature-framework of integrity-guidance: n/a				

Table 2: Supplementary Advice for Qualifying Features: A246. *Lullula arborea*; Woodlark (Breeding)

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Breeding population (within the SPA)	**Population abundance**	Restore the size of the breeding Woodlark population to a level which is consistently above 154 breeding pairs, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent.	See notes for this attribute in Table 1 above. The population objective is under review due to the unusual conditions in Sandlings Forest following the 1987 gale that felled most of the trees, leading the creation of a larger than normal area of optimum open habitat which supported a peak in ground-nesting bird numbers. A more realistic population target is currently being modelled, and this document will be updated when this has been agreed.	
Supporting habitat (both within and outside the SPA): disturbance	**Minimising disturbance caused by human activity**	Reduce the frequency, duration and/or intensity of disturbance affecting nesting, roosting, foraging or feeding birds so that the breeding Woodlark population is not significantly disturbed.	The nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level that may substantially affect their behaviour, and consequently affect the long-term viability of the population. Such disturbing effects can for example result in changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, abandonment of nest sites and desertion of supporting habitat (both within or outside the designated site boundary where appropriate). This may undermine successful nesting, rearing, feeding and/or roosting, and/or may reduce the availability of suitable habitat as birds are displaced and their distribution within the site contracts. Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals and structures. This may become more of an issue as the population recovers and if an increase in development locally leads to an increase in recreational pressure in the Sandlings.	
Supporting habitat (both within and outside the SPA): extent and distribution	**Extent and distribution of supporting breeding habitat**	Restore the extent, distribution and availability of suitable breeding habitat which supports the feature for all necessary stages of its breeding cycle (courtship, nesting, feeding)	Conserving or restoring the extent of supporting habitats and their range will be key to maintaining the site's ability and capacity to support the SPA population. The information available on the extent and distribution of supporting habitat used by the feature may be approximate depending to the nature, age and accuracy of data collection. This target will apply to any supporting habitat which is known to occur outside the site boundary [give details if relevant].	FORESTRY COMMISSION, 2008. Rendlesham. Forest Design Plan FORESTRY COMMISSION, 2007. Tunstall Forest Design

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			Habitat management and extent has been established by FC modelling; this will be reviewed in 2020. Restoring the habitat within the SPA will increase the availability and suitability for the interest features, contributing to the recovery of the population.	Plan.
Supporting habitat (both within and outside the SPA): function/ supporting process	**Air quality**	Restore as necessary the concentrations and deposition of air pollutants to below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).	See notes for this attribute in Table 1 above.	More information about site-relevant Critical Loads and Levels for this SPA is available by using the 'search by site' tool on the Air Pollution Information System (www.apis.ac.uk).
Supporting habitat (both within and outside the SPA): function/ supporting process	**Conservation measures**	Restore management or other measures (whether within and/or outside the site boundary as appropriate) necessary to restore the structure, function and/or the supporting processes associated with breeding Woodlark and its supporting habitats.	Active and ongoing conservation management is often needed to protect, maintain or restore this feature at this site. Other measures may also be required, and in some cases, these measures may apply to areas outside of the designated site boundary in order to achieve this target. Further details about the necessary conservation measures for this site can be provided by Natural England. 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. Habitat management and extent has been established by FC modelling; this will be reviewed in 2020	FORESTRY COMMISSION, 2008. Rendlesham. Forest Design Plan FORESTRY COMMISSION, 2007. Tunstall Forest Design Plan. NATURAL ENGLAND, 2015. Site Improvement Plan: Sandlings (SIP210). ENGLISH NATURE, 2005. Views about the management of Sandlings Forest SSSI.
Supporting habitat (both within	**Food availability within**	[Maintain or restore] the distribution, abundance and availability of key prey items	The availability of an abundant food supply is critically important for successful breeding, adult fitness and survival and the overall sustainability of the population. As a result, inappropriate management	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
and outside the SPA): function/ supporting process	**supporting habitat**	(e.g. spiders, weevils, caterpillars) at preferred prey sizes preferred by breeding Woodlark.	and direct or indirect impacts which may affect the distribution, abundance and availability of prey may adversely affect the population.	
Supporting habitat (both within and outside the SPA): structure	**Landscape**	Restore open and unobstructed terrain, typically within at least 0.2 km of nesting areas, with no increase in tall (>0.2 m) vegetation cover to >50% of the site overall.	This feature is known to favour large areas of open terrain, largely free of obstructions, in and around its nesting, roosting and feeding areas. Often there is a need to maintain an unobstructed line of sight within nesting, feeding or roosting habitat to detect approaching predators, or to ensure visibility of displaying behaviour. An open landscape may also be required to facilitate movement of birds between the SPA and any off-site supporting habitat.	
Supporting habitat (within the SPA): predation	**Predation**	[Reduce or restrict] the predation and disturbance of breeding Woodlark caused by native and non-native predators.	This will ensure that breeding productivity (number of chicks per pair) and survival are sustained at rates that maintain or restore the abundance of the feature. Impacts to breeding productivity can result directly from predation of eggs, chicks, juveniles and adults, and also from significant disturbance. The presence of predators can influence bird behaviours, such as abandonment of nest sites or reduction of effective feeding. Where evidence suggests predator management is required, measures can include their exclusion through fencing and scaring or by direct control. Any such measures must consider the legal protection of some predators, as well as the likely effects of such control on other qualifying features.	Predation is not considered to be a problem at present, but this may change as the population recovers.
Supporting habitat (within the SPA): structure	**Vegetation characteristics**	Restore the mix of trees, ground vegetation and bare ground (including frequency of bare patches of <0.5 ha within mosaic of short (<5 cm) to medium (10-20 cm) ground vegetation, and small clumps of shrubs or trees scattered throughout nesting and feeding areas.	The height, cover, variation and composition of vegetation are often important characteristics of habitats supporting this feature which enable successful nesting/rearing/concealment/roosting and/or displaying. Many bird species will have specific requirements that conservation measures will aim to maintain, for others such requirements will be less clear. Activities that may directly or indirectly affect the vegetation of supporting habitats and modify these characteristics may adversely affect the feature. Restoring the habitat within the SPA will increase the availability and suitability for the interest features, contributing to the recovery of the population.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: function/ supporting process	**Adaptation and resilience**	Maintain the ability of the feature's supporting habitats to adapt or evolve to wider environmental change, either within or external to the site	This recognises the increasing likelihood of natural habitat features needing 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 sea levels, precipitation and temperature for example, which are likely to affect the extent, distribution, composition and functioning of a feature within a site. The vulnerability and response of features to such changes will vary. The overall vulnerability of this SPA to climate change has been assessed by Natural England as being low, taking into account the sensitivity, fragmentation, topography and management of its habitats. These sites are considered to be vulnerable overall but are a lower priority for further assessment and action. Individual species may be more or less vulnerable than their supporting habitat itself. In many cases, change will be inevitable so appropriate monitoring would be required. 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.	NATURAL ENGLAND, 2015. Climate Change Theme Plan and supporting NBCCV Assessments for SACs and SPAs [both available at http://publications.naturalengland.org.uk/publication/4954594591375360].
Version Control Advice last updated: **1 March 2019** Population abundance: additional text to clarify the unusual conditions in the Sandlings Forest which influenced the current baseline population levels.				
Variations from national feature-framework of integrity-guidance: n/a				