



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

**Richmond Park Special Area of Conservation (SAC)
Site code: UK0030082**



Photo captions: (left) pair of Stag Beetles © Steven Falk; and (right) Richmond Park © Natural England

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About this document

This document provides Natural England's supplementary advice about the European Site Conservation Objectives relating to Richmond Park 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 on which the qualifying features will depend and which are most likely to contribute to a site's overall integrity. It sets out minimum targets for each qualifying feature 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

About this site

European Site information

Name of European Site	Richmond Park Special Area of Conservation (SAC)
Location	Greater London
Site Maps	The designated boundary of this site can be viewed here on the MAGIC website
Designation Date	April 2005
Qualifying Features	See section below
Designation Area	846.68ha
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)	Richmond Park SSSI
Relationship with other European or International Site designations	n/a
Other information	Natura 2000 Standard Data Form for Richmond Park SAC

Site background and geography

Richmond Park SAC is situated in south- west London enclosed by densely settled suburbs including Kingston, Putney, Richmond and Wimbledon. It is one of the largest open spaces in Greater London and the largest of the Royal Parks.

Raised above the surrounding area and more undulating, the park sits on glacial deposits and river terrace gravels overlying London Clay. It provides wide ranging views over London. The best known of these is probably that of St Paul's Cathedral from King Henry's mound.

King Charles I enclosed the park in the 17th century as a royal hunting forest. He was also responsible for introducing herds of red and fallow deer which have been a significant feature ever since. The combination of historic grazing by deer and geology has had a significant impact, producing a mosaic of habitats including acid grassland, marshy grassland and neutral grassland as well as open parkland and wood pasture. The area of unimproved acid grassland within the park is the largest in Greater London, characterised by native grasses such as brown bent *Agrostis canina*, sheep's fescue *Festuca ovina* and wavy hair-grass *Deschampsia flexuosa*. In marshier grassland, species such as purple moor-grass *Molinia caerulea* and heath rush *Juncus squarrosus* occur. Where the ground is permanently waterlogged, rushes *Juncus* spp., sedges *Carex* spp. and tufted hair grass *Deschampsia cespitosa* are prevalent.

The parkland supports many ancient and veteran trees, particularly oak, which host a significant assemblage of invertebrates associated with dead and decaying wood and the SAC is one of four primary sites in England for the stag beetle *Lucanus cervus*, a globally threatened species.

The park is greatly valued for recreational activities. Together with the nearby Wimbledon Common, it provides one of the best places for walking, cycling and horse riding in Greater London.

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 Species:

- **S1083 Stag beetle *Lucanus cervus***

The stag beetle is the UK's largest terrestrial beetle, and amongst the most spectacular, reaching 7 cm in length. Featuring shiny chestnut-violet wing-cases, the stag beetle is characterised by possessing large mandibles (jaws) which are antler-shaped in the male, giving them their common name. These 'antlers' are used for fighting other males, whereas the female's mandibles, being smaller, are more powerful.

The stag beetle requires decaying wood to complete its lifecycle. Its eggs are laid underground in the soil next to logs or the stumps of dead trees (typically apple *Malus* spp., elm *Ulmus* spp., lime *Tilia* spp., beech *Fagus sylvatica* and oak *Quercus* spp.). The beetle larva (or grub) will spend up to seven years in the wood, slowly growing in size. Timber is also utilised, especially sunken fence posts.

Adult stag beetles emerge from mid-May until late July. Males emerge earlier to actively search for females to mate, and can often be seen flying on sultry summer evenings an hour or two before dusk. As adults they are short-lived and generally die after mating, although occasionally some may over-winter in places such as compost heaps.

Richmond Park SAC has a large number of ancient trees with decaying timber. It is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus*, and more generally is a site of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees.

Table 1: Supplementary Advice for Qualifying Features: S1083 Stag beetle *Lucanus cervus*

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: structure/function	Decaying-wood habitat	<p>Maintain an abundance and constant supply of ancient trees, standing dead trees, fallen trees, stumps and roots in a state of decay.</p> <p>In urban areas ensure larger native trees and man-made timber structures persist as a larval resource.</p>	<p>Female stag beetles lay their eggs near the rotting wood and roots of broadleaved trees which are in contact with the soil so that the wood remains moist and is able to rot. Once they have mated, the females lay small, round eggs below ground in rotting wood, particularly log piles, rotting tree stumps and old fence posts. These larvae feed on the decaying wood around them for at least three years and up to five years after which they will begin to pupate into adults. It is therefore critically important that sources of decaying timber are left undisturbed wherever possible.</p> <p>This target may also be applicable to off-site habitat which may provide important larval habitat to support the SAC population. Local gardens, parks and roadside trees may all be important in helping to maintain the local stag beetle population if decaying timber is present and may help to 'connect' the SAC population with neighbouring colonies.</p>	
	Woodland habitat structure	Maintain a well-structured broadleaved woodland habitat, with sheltered, sunlit glades and rides containing stumps and other suitable decaying wood	<p>During their short adult lives the male stag beetles will spend their days sunning themselves in an attempt to gather strength for the evening's activities of flying in search of a mate.</p> <p>It is therefore desirable that areas of woodland are structurally diverse with widespread availability of large-diameter decaying wood and with good functional linkage across the habitat which facilitates movement of stag beetles to find mates. It is also important that there is good functional linkage between the site and adjacent areas of suitable habitat so that the stag beetle population does not become genetically isolated.</p>	
Supporting processes (on which the feature and/or its supporting habitat relies)	Natural processes	Ensure the continuity of timber decay and nutrient recycling processes, in particular the continued provision of plentiful decaying stumps and roots	<p>The natural processes of decomposition and decay are important in providing optimal conditions for stag beetle to lay eggs and survive as larvae.</p> <p>The majority of decaying wood should be permanently moist and therefore timber is most favourable when buried at or near the soil surface in shaded or slightly shaded locations rather than exposed above ground and in full sun.</p>	
Population (of the feature)	Population abundance	Maintain or restore the presence of the stag beetle population across its full range within the SAC, whilst avoiding deterioration from its current level	<p>This will ensure there is a viable population of the feature which is being maintained at or increased to a level that contributes as appropriate to its Favourable Conservation Status across its natural range in the UK.</p> <p>Due to the dynamic nature of population change, the target-value given for</p>	PERCY, C., BASSFORD, G. & KEEBLE, V. 2000. Findings of the 1998 National Stag Beetle

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		as indicated by the latest mean peak count or equivalent.	<p>the population size or presence 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 or presence 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.</p> <p>There are currently no reliable means of estimating stag beetle population size other than the collation of records of direct observation of adults during the peak period of mating activity. This means that estimates inevitably include a large degree of uncertainty and will tend to vary according to recording effort. Populations are thought to vary significantly in size from year to year according to natural population cycles, and the availability and abundance of suitable larval habitat.</p> <p>Given the likely fluctuations in numbers over time, any impact-assessments should focus on the current size and range 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 designated, and seeks to avoid plans or projects that may affect the site giving rise to the risk of deterioration.</p>	Survey. People's Trust for Endangered Species, London, UK.
Supporting processes (on which the feature and/or its supporting habitat relies)	Conservation measures	Maintain the management measures (either within and/or outside the site boundary as appropriate) which are necessary to maintain or restore the structure, functions and supporting processes associated with the stag beetle feature and/or its supporting habitats.	<p>Active and ongoing conservation management is needed to protect, maintain or restore this feature at this site. This target may also be applicable to off-site habitat which may provide important larval habitat to support the SAC population.</p> <p>Further details about the necessary conservation measures for this site can be provided by contacting 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.</p>	NATURAL ENGLAND, 2014. Site Improvement Plan: Richmond Park SAC (SIP184)
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