



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

Holnest Special Area of Conservation (SAC) Site Code: UK0030350



Holnest 2008 - 2015

Date of Publication: 21 March 2019 Page 1 of 14

About this document

This document provides Natural England's supplementary advice about the European Site Conservation Objectives relating to Holnest SAC. This advice should therefore be read together with the SAC Conservation Objectives available <u>here</u>.

This advice replaces a draft version dated 25 January 2019 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 <u>HDIRConservationObjectivesNE@naturalengland.org.uk</u>

About this site

European Site information

Name of European Site	Holnest Special Area of Conservation (SAC)
Location	Dorset
Site Map	The designated boundary of this site can be viewed <u>here</u> on the MAGIC website
Designation Date	10 December 2009
Qualifying Features	See section below
Designation Area	54.83 hectares
Designation Changes	Not applicable
Feature Condition Status	Details of the feature condition assessments made at this site can be found using Natural England's <u>Designated Sites System</u>
Names of component Sites of Special Scientific Interest (SSSIs)	Holnest SSSI
Relationship with other European or International Site designations	None

Site background and geography

Dorset is a county at the south-western edge of the range of great crested newts in England and the site supports one of the largest Dorset populations. Holnest is located seven kilometres to the south of Sherborne and the site includes around 40 ponds set in a matrix of terrestrial habitats, comprising areas of semi-improved grassland, scrub, associated semi-natural habitats and woodland bounded by fences and hedgerows. The surrounding area is low lying with little topography and has been extensively drained creating a network of ditches across the mainly pastoral landscape. The ponds present have a range of sizes, depths, profiles and origins, and include some recently-created ornamental ponds as well as traditional farm ponds. A large population of Great crested newts Triturus cristatus is present, with over 200 individuals having been recorded at one pond in spring 2003. The woodland and mature hedge boundaries provide ideal hibernation foraging and connected habitat.

The ponds support marginal plants such as branched bur-reed *Sparganium erectum*, water-plantain *Alisma plantago-aquatica*, greater reedmace *Typha latifolia* and reed sweet-grass *Glyceria maxima* with broad-leaved pondweed Potamogeton natans the most frequent floating vegetation.

The broad-leafed woodlands comprise a canopy of ash *Fraxinus excelsior* and pedunculate oak *Quercus robur* with some downy birch *Betula pubescens*, and with an understorey of hazel *Corylus avellana*, blackthorn *Prunus spinosa* and grey willow *Salix cinerea*. The ground flora is dominated by bluebell *Hyacynthoides non-scripta* and includes moschatel *Adoxa moschatellina*, sanicle *Sanicula europea* and wood speedwell *Veronica montana*. The presence of dormice *Muscardinus avellanarius* is additionally indicative of the management history and quality of the broad-leafed woodland. The natural features present within the semi-natural woodlands confirm their importance as a valuable supporting habitat for the newt population.

The grasslands are managed with a varied height structure and provide good foraging conditions for great crested newts, the range of plant species being indicative of similarly diverse invertebrate communities. Most has been improved in the past but it is not now farmed intensively. Some of the traditional unimproved grassland herbs, such as pepper-saxifrage *Silaum silaus*, saw wort *Serratula tinctoria* and corky-fruited water-dropwort *Oenanthe pimpinelloides*, persist around field margins that are dominated by tufted hair-grass *Deschampsia caespitosa* and Yorkshire fog *Holcus lanatus*. Grasslands of nature conservation interest has been re-established at Ryewater and other herbs and grasses present here include sweet vernal grass *Anthoxanthum odoratum*, crested dog's-tail *Cynosurus cristatus*, betony *Stachys officinalis*, grass vetchling *Lathyrus nissolia* and dyer's greenweed *Genista tinctoria*.

Associated species of biodiversity interest include the freshwater mud snail *Lymnaea glabra*, a scarce species vulnerable to habitat damage. Three nationally scarce moths have also been recorded: the mocha *Cyclophora annulata*, the marbled green *Cryphia muralis* and the tortrix moth *Epiblema tetragonana* and Barn owls *Tyto alba* are resident and forage across the grasslands.

Located within the National Character Area of the <u>Blackmoor Vale and Vale of Wardour</u>, the site is representative of a formerly wet landscape improved for lowland pasture. Small woodlands, a network of small fields with drainage ditches and thick hedges and numerous in field ponds. In addition a substantial part of the site is under a less agriculturally driven management regime and here a number of new ponds and features have been created some specifically to foster the newt population. The site is situated on Oxford Clay and the resulting clay soils are slowly permeable and seasonally waterlogged.

The site is split into two main parcels by a rural road. Both areas are managed by private landowners. The northern area operates a level of public access through supervised educational visits with the agreement of the owner. There is one Right of Way running along the edge of the northern boundary of the designated sites.

Threats to the site are primarily those associated with changes to the management regime such as intensification of grazing, agricultural improvement, increased drainage, removal of hibernation features such as dead wood etc. The northern part of the site is largely landscaped and risks include the loss of ponds to succession, introduction of fish and introduction of invasive non-native species. Predation from species such as rats can in some cases be a consideration. Great crested newts are known to utilise surrounding areas up to around 500m from their breeding ponds, risks due to intensification of management including free ranging poultry/pheasants, loss of grassland, woodland and linking features such as hedges and ditches in the area around the designated site can impact on the population. The loss of breeding sites in the area outside the designated sites should be considered in the light of avoiding the effects of fragmentation of the wider meta-population and consequent genetic isolation of the animals in the designated site.

Management has focussed on maintaining a mixed mainly extensive grazing regime, increasing numbers of ponds and managing the existing hedges, ditches and woodlands to secure or enhance their value to the great crested newts.

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:

None

Qualifying Species:

• S1166 Great crested newt Triturus cristatus

The great crested newt is the largest native British newt, reaching up to around 17cms in length. Newts require aquatic habitats for breeding. Eggs are laid singly on pond vegetation in spring, and larvae develop over summer to emerge in August – October, normally taking 2–4 years to reach maturity. Juveniles spend most time on land, and all terrestrial phases may range a considerable distance from breeding sites.

Holnest encompasses around 40 ponds set in a matrix of terrestrial habitats, comprising areas of semiimproved grassland, scrub, associated semi-natural habitats and woodland bounded by fences and hedgerows. The ponds exhibit a range of sizes, profiles and origins, and include some recently-created ornamental ponds as well as traditional farm ponds. A large population of S1166 Great crested newts *Triturus cristatus* is present, with over 200 individuals having been recorded at one pond in spring 2003. The woodland areas provide ideal hibernation habitat.

The location of the site in the south western edge of the species range and its number of small scale ponds set within a pasture, scrub and woodland area with a wide range of natural features are particularly noteworthy and are critical in supporting a large meta-population of newts and in increasing the relative biodiversity importance of the site.

The great crested newt is also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended), making it a 'European Protected Species'. A licence may therefore be required for any activities likely to harm or disturb great crested newts.

Table 1: Supplementary Advice for Qualifying Features: S1166. Triturus cristatus; Great crested newt

At	tributes	Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Population (of the feature)	Population abundance	Maintain the abundance of the population at a level which is above the past maximum count of 289, whilst avoiding deterioration from its current level as indicated by the latest mean peak count or equivalent over any three year period.	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. Due to the dynamic nature of population change, the target-value given for 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 (generally at least 10 years). 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 size 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. 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 in any assessment. Unless otherwise stated, the population size or presence 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	Amphibian and Reptile Conservation Trust (ARCT) have information about the site as do the Dorset Environmental Records Centre (DERC).

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			GCN population will normally be based on the peak count of adults undertaken in the known peak season for the area, and in-year weather conditions; likely to be Mid-April to Mid-May in central areas. The peak count is derived by summing the	
			counts across the site on 'best' night for each season. Considerable natural between-year variation in population counts is frequent.	
			The current count data available to Natural England is likely to be a serious underestimation because of the number and dispersed nature of the ponds across the site and the inherent difficulties in surveying numbers of animals. The historic count data should not be relied upon in consideration of favourable conservation status.	
Population (of the feature)	Population viability	Maintain the presence of great crested newt eggs in breeding ponds at a level which is likely to Maintain the abundance of the population at or above its target level.	A "breeding pond" is defined as a pond in which egg-laying and successful metamorphosis (e.g. the pond doesn't dry up too soon) is likely to occur at least once every three years. The optimum time to survey for eggs is mid-March to mid-May. Presence of eggs can be recorded by day or night visits and surveys should be combined with visits for the adult component.	
			Because there are over 40 ponds establishing a consistent picture of the functional role of the ponds for great crested newts is difficult; eDNA surveys can help to confirm presence and absence of great-crested newts in individual ponds to help target more detailed surveys to confirm breeding through egg searches. Other methodologies such as torching and artificial egg substrates may also be used in combination although all methods are resource intensive. Ensuring that recruitment to the non-aquatic stage is also important where a detailed assessment is required.	
Population (of the feature)	Supporting metapopulations	Maintain the connectivity of the SAC population to any associated metapopulations (either within or outside of the site boundary)	Great crested newts often exist in metapopulations. A metapopulation is a group of associated populations made up of newts which breed in, and live around, a cluster of ponds. There will be some interchange of newts between these populations, even though most adults consistently return to the same pond to breed, and so it will be important to avoid the	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: extent and distribution	Distribution of supporting habitat	Maintain the distribution and continuity of the feature and its supporting habitat, including where applicable its component vegetation types and associated transitional vegetation types, across the site	 isolation of these populations from each other. Dispersal rates of great crested newts vary, but capture/recapture studies have demonstrated movements up to 1.3km and individual animals have been known to travel over 1000m to colonise new ponds. The distances between the closest breeding ponds in each of the three pond clusters are: northern and central 493m; central and southern 600m. These distances are well within the above dispersal distances of individual newts so it is considered that the populations within the SSSI form one metapopulation. The site is also considered to be of interest because it is a good example of a large great crested newt metapopulation based on a series of semi-natural ponds and semi-natural terrestrial habitats comprising grasslands and woodlands. Many other nationally important great crested newt populations are found in old quarry sites and Holnest has a greater degree of naturalness compared with these. A contraction in the range, or geographic spread, of the feature (and its component vegetation) 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. Contraction may also reduce and break up the continuity of a habitat within a site and how well the species feature is able to occupy and use habitat within the site. Such fragmentation may 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 this feature and this may affect its viability. A range of sizes profiles and aged ponds occurs across the site. The distribution of wetland and scrub/woodland features provides for hibernation/ foraging and movement requirements at present. 	(where available) See above sources of information. Other sources include the Stewardship/HLS agreement data for the site.
habitat: extent and distribution	supporting habitat	habitat(s) which support the feature: c.40 ponds.	overall favourable conservation status of the feature at a UK level, it is important to maintain or if appropriate restore the extent of supporting habitats and their range within this SAC.	within the team as well as air photography on Google Earth to monitor gross changes. OS

Att	tributes	Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		Mesotrophic grassland 25.8 hectares, Improved grassland 11 hectares, broadleaved semi- natural woodland 12.6 hectares, arable (winter bird mix) 2 hectares.	The information available on the extent and distribution of supporting habitat used by the feature may be approximate depending on the nature, age and accuracy of data collection, and may be subject to periodic review in light of improvements in data. Maintain data on site changes e.g. pond creation, management activity such as woodland/scrub and ditch management	mapping may also pick out increased ponds and other infrastructure.
Supporting habitat: structure/ function	Cover of macrophytes	Maintain a high cover of macrophytes, typically between 50-80%, within ponds	Marginal and emergent vegetation are important components of a great crested newt pond as they provide excellent egg- laying sites.	
Tunction			Good plants for this purpose include water forget-me-not Myosotis scorpioides, flote/sweet grass Glyceria fluitans and great hairy willowherb Epilobium hirsutum. They are, however, an integral part of the natural successional change of a waterbody and whilst it is preferable to have a good range and area of marginal plants, they should not extend across the entire water surface. In most circumstances it will be desirable to retain a fringe of marginal and emergent vegetation around at least half of a pond's edge. Where the marginal vegetation is particularly invasive, and provides no specific benefit to crested newts, it may be decided that its complete removal is necessary.	
Supporting habitat: structure/ function	Overall Habitat Suitability Index score	For this SAC, Maintain an overall Great Crested Newt Habitat Suitability Index score of no less than 0.8.	The Habitat Suitability Index provides a measure of evaluating habitat quality and quantity for Great Crested Newts. The Index score lies between 0 and 1, with 1 representing optimal GCN habitat. In general, the higher the index score the more likely the site is to support great crested newts. The HSI methodology is documented in ARG-UK Advice Note 5 (May 2010). The HSI should not be used as a substitute for more detailed surveys and consideration of other attributes where necessary.	Amphibian and reptile groups of the united kingdom ARG UK Advice Note 5 <u>http://www.arguk.org/info-</u> <u>advice/advice-notes/9-great-</u> <u>crested-newt-habitat-suitability-</u> <u>index-arg-advice-note-5/file</u>
Supporting habitat: structure/	Permanence of ponds	Maintain the permanence of water within ponds present within the site	Ponds to include breeding ponds as well as non-breeding ponds, since the latter may be used for foraging or sustaining prey populations. Ponds should have a high degree of	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
function			permanence (they never or rarely dry out other than though natural drought) and this may be adversely affected by changes in the supply or flow of water (from either surface water and/or groundwater sources] to the ponds. The general condition of all the ponds is good some are more prone to fluctuations relating to levels in connecting ditches.	
Supporting habitat: structure/ function	Presence of fish and wildfowl	Ensure fish and wildfowl are absent in all ponds.	At high densities waterfowl (i.e. most water birds such as ducks, geese and swans but excluding moorhen) can remove all aquatic vegetation, adversely affect water quality and create turbid pondwater conditions. Some may also actively hunt adult GCNs and their larvae. Similarly fish can be significant predators of GCN larvae. The presence of waterfowl and fish can reduce habitat suitability. These should be wholly absent form sites which support fewer than 5 ponds. It is not known whether there are native populations of stickleback or eels in the ditches and hence ponds, however this does not seem to be a concern at the time the advice was drafted. The presence of ornamental fish should be avoided entirely. The use of stock including cattle and water buffalo can lead to turbid conditions in some ponds but overall this has not been a concern. Should more than 30 of the ponds become significantly turbid during the summer months this should be investigated.	
Supporting habitat: structure/ function	Presence of ponds	Maintain the number or surface area of ponds present within the site to 40 ponds.	Ponds to include breeding ponds as well as non-breeding ponds, since the latter may be used for foraging or sustaining prey populations. The surface area of a pond is taken from when water reaches its highest level (excluding flooding events), which will usually be in the spring. The designated site has approximately 40 ponds with a number having been added to the southern area more recently. In the northern area there are a wide range of ponds from more shallow temporary ponds to deep well vegetated ponds and concrete lined ornamental ponds.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Supporting habitat: structure/ function	Shading of ponds	Ensure pond perimeters are generally free of shade (typically no more than 60% cover of the shoreline)	Shading from trees (not including emergent pond vegetation) can negatively affect the abundance of marginal vegetation in ponds, water temperature and the rate of hatching and development of great crested newt eggs and larvae. An assessment of all ponds will be required to consider trends and any necessary management action.	
Supporting habitat: structure/ function	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, within typical values for the supporting habitat	Soil supports basic ecosystem function and is 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 the supporting habitat of this Annex II feature.	
Supporting habitat: structure/ function	Supporting terrestrial habitat	Maintain the quality of terrestrial habitat likely to be utilised by Great Crested Newts, with no fragmentation of habitat by significant barriers to newt dispersal.	Great crested newts need both aquatic and terrestrial habitat. Good quality terrestrial habitat, particularly within 500m of the breeding ponds, provides important sheltering, dispersing and foraging conditions and can include all semi-natural habitat along with meadows, rough tussocky grassland, scrub, broadleaved woodland, as well as low-intensity grazed farmland. Good quality terrestrial habitat for GCNs has structural diversity which can be provided by features such as mature species rich hedges, ditches, , old farm buildings, , rabbit burrows, fallen dead wood and stumps and small mammal holes. Good habitat provides a range of invertebrates, such as earthworms, insects, spiders and slugs, on which GCNs are known to feed. Fragmentation refers to significant barriers to GCN movement such as walls and buildings, but not footpaths or tracks. Newts disperse over land to forage for food, and move between ponds. The distances moved during dispersal vary widely according to habitat quality and availability. At most sites, the majority of adults probably stay within around 250m of the breeding pond but may well travel further if there are areas of high quality foraging and refuge habitat extending beyond this range.	The historic hard copy files provide evidence of GCN movement across the site and surrounding landscape from a proposed waste disposal application (land raising site nearby) which was dismissed.

Att	tributes	Targets	Supporting and Explanatory Notes	Sources of site-based evidence
				(where available)
Supporting processes (on which the feature and/or its supporting habitat relies)	Adaptation and resilience	Maintain the feature's ability, and that of its supporting habitat, to adapt or evolve to wider environmental change, either within or external to the site	The overall vulnerability of this SAC to climate change has been assessed by Natural England (2015) as being moderate, taking into account the sensitivity, fragmentation, topography and management of its habitats. This means that this site is considered to be vulnerable overall but moderately so. 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 advisable. This recognises the increasing likelihood of supporting 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 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. 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. The site sits within an area of lowland pasture which is bisterically which be a base deviced. The aritical appet	NATURAL ENGLAND, 2015. Climate Change Theme Plan and supporting National Biodiversity Climate Change Vulnerability assessments (NBCCVAs) for SACs and SPAs in England [Available at http://publications.naturalengland. org.uk/publication/495459459137 5360]
			are hydrological management and external influences due to land management practices such as land use, herbicide, pesticide and fertiliser application etc.	
Supporting	Air quality	Maintain or, where necessarv.	The supporting habitat of this feature is considered sensitive to	More information about site-
processes		restore concentrations and	changes in air quality. Exceedance of these critical values for	relevant Critical Loads and Levels
(on which		deposition of air pollutants to at	air pollutants may modify the chemical status of its substrate,	for this SAC is available by using
the feature		or below the site-relevant	accelerating or damaging plant growth, altering its vegetation	the 'search by site' tool on the Air

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
and/or its supporting habitat relies)		Critical Load or Level values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).	structure and composition (including food-plants) and reducing supporting habitat quality and population viability of this feature. Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant 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. 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. 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.	Pollution Information System (www.apis.ac.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 the structure, functions and supporting processes associated with the feature and/or its supporting habitats.	 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. 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. The principal management measures on this site are: Maintain the extent, diversity and quality of pools and terrestrial habitat; through woodland/scrub management, ditch management, monitoring and reporting of overgrazing and avoiding applications of herbicide and pesticides, pond creation; Monitor great crested newt populations (adults and eggs) every year. 	Natural England's Views about the Management of the SSSI which underpin this SAC are available from https://designatedsites.naturaleng land.org.uk/PDFsForWeb/VAM/2 000477.pdf NATURAL ENGLAND, 2014. Holnest SAC Site Improvement Plan (SIP106). Available from: http://publications.naturalengland. org.uk/publication/576762721337 3440?category=57555151916892 16 Amphibian and Reptile Conservation Trust (ARCT) have information about the site as do

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence
				(where available)
Supporting processes (on which the feature and/or its supporting habitat relies)	Water quantity/quality	Where the feature or its supporting habitat is dependent on surface water and/or groundwater, Maintain water quality and quantity to a standard which provides the necessary conditions to support the feature.	 invasive species. Prevent intentional and unintentional human damage through education and close liaison and communication with the owners and site managers. For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year. 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 to reflect the ecological needs of the species feature. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC. The site is vulnerable to changes in water levels (due to changes in drainage as well as long term precipitation) as well as water quality from external agricultural activities 	the Dorset Environmental Records Centre (DERC). The hard copy survey data relating to SSSI selection will be held on the site file and may be available from Natural England on request.
Supporting processes (on which the feature or its supporting habitat relies)	Water quality	Maintain the quality of pondwaters within the site as indicated by the presence of an abundant and diverse invertebrate community.	As the clarity and chemical status of water bodies supporting GCNs can be subjective, the presence of an abundant and diverse community of freshwater invertebrates can be indicative of suitable water quality standards. Invertebrate groups present should include groups such as mayfly larvae and water shrimps. This will ensure ponds support a healthy (mainly invertebrate) fauna to provide food for developing GCN larvae and adults.	
Version Control Advice last updated: 20 March 2019 following stakeholder feedback. Population viability additional explanatory text added aid understanding of survey methods to assess this attribute Variations from national feature-framework of integrity-guidance: N/A				