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CWS Survey: Shuttleton Common Site code: ST11/032



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Shuttleton Common (Mid Devon)

County Wildlife Site Monitoring Form

1. Site information

SITE NAME Shuttleton Common	SITE CODE ST11/032		CENTRAL GRID REFERENCE ST127113		
REASON FOR MONITORING VISIT BMF	DATE SITE MONITORED + NAME (ORGANISATION) 12/08/2015 – A. Worsley, B. Ayres (DBRC)		DATE OF LAST SURVEY + NAME 26/08/2010 – H. Gibbons		
DISTRICT / UNITARY / NATIONAL PARK / AONB Mid Devon / Blackdown Hills AONB	PARISH / WARD Hemyock		DATE OF LAST ADVISORY VISIT / NAME & ORGANISATION		
SITE STATUS CWS	MANAGEMENT BODY Hemyock Parish Council/DWT		STRATEGIC NATURE AREA Hackpen Hill to North Hill (220)		
LANDOWNER/MANAGER - Name, address and other contact details (incl email). Hemyock Parish Council Clerk to Hemyock Parish Council: Donna Evans Tel: 01823 680968 E-mail: <u>hemyockpc@gmail.com</u> Access permission from: Donna Evans					
•	R ASPECT MAJOR SLO Flat			ALTITUDE (m) 240-245	
GEOLOGY (solid / drift from Geology maps) Upper Greensand Formation – Sandstone, Clay-with-flints Formation - Gravel, Clayey					
SOILS – Coarse Silty, Slightly Acid.					
ORIGINAL REASON FOR CWS DESIGNATION AND COMMENTS Lowland heathland					

2. Summary of site visit

BAP habitats present	Purple moor-grass & rush pasture
Overall Site Condition	Red / amber / green
Overall Management Assessment	High /-Medium / Low
Comments / key issues / Management recommendations	A site initially designated for its lowland heath (wet and dry) communities, which has transitioned into degraded purple moor-grass dominated mire with little botanical interest. Left unmanaged for many years but recently brought back into management following previous survey, with advice given by Devon Wildlife Trust and the Beef, Butterflies and Trees project. Grazing is not currently in place due to stock proofing restrictions so swaling and cutting have been instigated instead. Ideally grazing would be the most effective management if a solution could be reached but the current management is very positive and hopefully the condition of the site will improve over time if the current management is continued.
Action needed (e.g. send details to NE, signpost to adviser)	Signpost to Devon Wildlife Trust reserves team.
CWS criteria met and Site boundary appropriate?	Yes
Current reason for CWS designation	Over 0.5ha of Mire/Lowland heath (M25a with slight affinities with H4 heath)
Other details or special interest of sit N/A	e

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3. SITE DESCRIPTION AND BAP HABITAT CONDITION ASSESSMENT(S)

Provide a <u>brief</u> description below and assess habitat condition using guidance notes. Include information such as type and size of holding, history of the site, other CWS nearby, location in relation to topography, main settlements, water courses, Parish boundaries, with an overview of habitats/notable species present. Please annotate the map provided to show key habitats and features e.g. BAP habitats, location of rare or notable species, management recommendations.

3.1 Description of CWS

Shuttleton Common is an area of common land in the parish of Hemyock, within the Mid Devon section of the Blackdown Hills and situated approximately 2km south of Hemyock village. One of a number of commons owned by the council, Hemyock was found to support degraded heath habitat which has transitioned into species-poor purple moor-grass dominated mire, with remnants of heath present in the form of cross-leaved heath and western gorse shrubs. However there is little other botanical interest and many of the species recorded when surveyed in 1991 (when the site was designated) have been lost. Other habitats include secondary downy birch dominated wet woodland and a very thin strip of acidic oak woodland. Bracken encroachment is also an issue with dense stands bordering the mire, as is scrub encroachment from the birch woodland. Significant efforts have been undertaken to bring the site back in to positive management and it is hoped this can continue. Ideally this site would be grazed, but there are issues with stock proofing (permission is needed from the Secretary of State to fence common land) and potential resistance from locals using the common. However in the longer term it could be worth considering temporary fencing to initiate short term pony grazing for parts of the year (preferably late May/early June) which would be of great benefit to the site. Further management recommendations are detailed in section 4.3 of this report.

3.2 Condition assessment of Biodiversity Action Plan (BAP) habitats >0.5ha. and those habitats for which the site is designated. *Mention whether the BAP habitat was identified in the previous survey. Assess each BAP habitat separately (unless a mosaic) using the template below. Refer to the guidance for condition criteria.*

Purple Moor-grass & Rush Pasture/Wet Heath

Compartment 1

The central portion of the site is a species-poor area of purple moor-grass dominated mire, with elements of heath showing in the form of locally frequent western gorse and cross leaved heath. Herb species are particularly scarce with some scattered tormentil throughout in limited quantities and single examples of ling and heath spotted orchid in one area where the sward is slightly less coarse. When surveyed in 1991 the mire was found to support a fairly rich sward with greater bird's-foot-trefoil, bilberry, heath milkwort, lousewort, *sphagnum* mosses and bell heather, which are no longer present. It also described the site as having affinities with dry and wet heath that suggested similarities with NVC communities M16 *Erica tetralix* - *Sphagnum compactum* (cross-leaved heath – compact bog moss) wet heath and H4 heath *Ulex gallii* - *Agrostis curtisii* (western gorse - bristle bent) heath. When re-surveyed in 2010 it was described as species-poor purple-moor grass mire, as it appears now in 2015, and the site currently has affinities with a particularly species-poor example of M25 *Molinia caerulea - Potentilla erecta* (purple moor-grass - tormentil) mire – particularly the *Erica tetralix* (cross-leaved heath) sub-community, although there are vague remnants of H4 in that western gorse is locally frequent in patches. It seems in the intervening years the diversity was lost due to a lack of management as purple moor-grass has become the dominant species.

With the current management regime the mire should become more species-rich in time but without regular grazing it will be difficult to maintain a varied structure within the sward, although rotational swaling will ensure some variation. It is possible that many of the species once present are still valid within the seed bank and could germinate if given the appropriate opportunities.





Lines of fire breaks have been cut through the purple moor-grass to make swaling separate portions of the site easier. The cut vegetation has been left in situ however which may result in nutrient enrichment and encourage growth of competitive species to the detriment of more delicate herbs and sedges. However, it is appreciated that funding and resources are limited and accessing appropriate machinery and willing contractors to undertake some of the bigger management tasks is not always straightforward.

It is possible the site has also dried out slightly since the 1991 survey when wet heath species and sphagnum mosses were present. This does not appear to be a result of any drainage on the site itself but could potentially be a result of changes in surrounding land usage. However the 1991 report states the site was 'freely drained' - which is unusual given the community described – so this is inconclusive.

Young birch scrub is spreading out from the woodland areas to the south and east.

Condition assessment (Area 1)

1) Cover of undesirable species <10%	Yes
2) Cover of large sedge species <30% and cover of large grass species <20%	Yes
3) Cover of invasive trees and shrubs <5%	No*
4) Cover of non-jointed rushes <50%	Yes
5) At least two indicator species frequent and two occasional (see Condition Assessment table)	No**
Habitat condition assessment (High/Medium/Low)	Low

* Although there has been some scrub clearance and stump treatment – and this should hopefully continue. ** Though with the current management species diversity should increase in time

Low - Although the mire currently scores low due to the lack of species, the management currently in place will almost certainly improve the site; it will be interesting to see how it develops with time.

Wet Woodland

Compartment 2

This section of woodland is secondary downy birch, having developed over the mire community present in the rest of the site. Downy birch is dominant in the canopy with a few scattered scots pine. Hybrid oak, rowan, hazel and holly are occasional in the understorey/shrub layer. Ground flora mainly comprises locally dominant purple moor-grass, locally abundant bramble and locally frequent broad buckler fern and creeping bent. Greater stitchwort has a rare distribution.

This area has affinities with NVC community W4 *Betula pubescens - Molinia caerulea* (downy birch - purple moor-grass) woodland.

Condition assessment (Area 2)	
1) Native species are dominant. Non-native species and invasive species account <10% of the vegetation	Yes
cover	
2) A diverse age and height structure	No
3) Free from damage (in the last 5 years) from stock or wild mammals – there should be evidence of tree	Yes
regeneration e.g. seedlings, saplings and young trees.	
4) Standing and fallen dead trees of over 20cm diameter are present	Yes
5) The area is protected from damage by agricultural and other adjacent operations	Yes
6) Are there at least 5 indicator species from the relevant NVC community frequent in the ground layer?	Yes*
Habitat condition assessment (High/Medium/Low)	Medium

* Although only just - This tends to be a fairly species-poor community, especially as this woodland is still developing. Some minor management tweaks could greatly enhance species diversity.

Medium – it is worth considering that the woodland is still in a process of development and as such is structurally constant and lacking in species. It is hoped this will improve in time, particularly with some minor tweaks to management. Woodland floor flora appeared to be species-poor, but the site was surveyed late in the year and some woodland species are bound to have gone over long before the survey was carried out. It is therefore considered the woodland should be graded as Medium.





3.3 Description of other habitats (non BAP habitat/BAP habitat <0.5ha.No condition assessment required.

Broadleaved woodland

Compartment 3

A thin strip of woodland, in places very thin with little tree cover, borders the east and part of the southern boundary of the site. The woodland appears to have upland oak-wood affinities, most likely due to acidity of the soil. The canopy mainly consists of pedunculate oak (possible hybrid as some sessile features) with occasional downy birch and locally frequent beech which is spreading from hedge banks. The shrub layer consists of locally frequent beech, hazel and downy birch with occasional grey willow and holly. Rowan is present with a rare distribution. Ground flora is varied, with patches of dense bracken or bramble, bare ground with leaf litter and more species—rich areas. Creeping bent is locally abundant, with bluebell, creeping soft-grass, honeysuckle, ivy, wood sage and bristle bent locally frequent and herb-robert, soft rush, broad buckler-fern, wavy hair-grass, cock's-foot and false oat grass occasional. Purple moor-grass becomes more frequent closer to the birch heavy wet woodland to the west.

<u>Bracken</u>

Compartment 4

Around the north and eastern perimeters of the mire area are dense stands of bracken which prior to the survey had been cut. It seems there is remnant mire below the mire but the bracken has become dominant here.

<u>Target Note A</u> – A small area of rough grassland and disturbed ground grading into scrub. This area was used for storing silage in past years and there appears some nutrient enrichment as a result. Nettles are dense and locally dominant with Yorkshire fog and creeping bent grasses frequent. Soft rush, creeping buttercup, greater bird's-foot-trefoil, hedge bindweed, selfheal, scentless mayweed, marsh cudweed, tufted vetch and marsh thistle are also present.

<u>Target Note</u> <u>B</u> – A strip of young birch scrub, clear felled trees and dense bramble below aerial wires, with purple moor-grass. The footpath in the north of the site is bordered by vegetation including bugle, wild angelica, common knapweed, timothy, common bent, tufted vetch, dog's mercury, bluebell, bracken and bramble.





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4. SITE MANAGEMENT ASSESSMENT

Please annotate the map to highlight management issues (e.g. poaching/scrub invasion/lack of stockproof boundaries) and expand below.

4.1 Description of habitat management (BAP habitat and non BAP where relevant)

Include details of current management (e.g. grazing regimes (stock, stocking level, season, use of avermectins), fertiliser (organic, inorganic, quantities, timing), use of herbicides, scrub/bracken/invasive species control, topping, hay cut (time year), woodland management, drainage, whether in ES/HLS other schemes, options within their agreement, when the scheme ends etc.

The common was left unmanaged for many years in which time it became severely degraded. In the last few years the parish council have made a concerted effort to improve the quality of their commons by bringing them back into positive management with help and advice from Devon Wildlife Trust staff. In 2011 the site was cleared of refuse and litter from unsympathetic use by the public over the years. In 2014 the purple moor-grass was swaled over winter to reduce thatch cover and reduce density of tussocky grass cover. In 2015 strips were cut into the mire to act as fire breaks and bracken was also cut. There has also been much effort to reduce scrub with some clearance and stump treatment.

The site is not grazed and is unlikely to be due to a lack of stock proofing, and issues with having to gain permission from the Secretary of State to fence common land. This is a shame as the site would greatly benefit from light grazing with hardy ponies or native cattle, almost certainly more than any management that can be implemented in absence of grazing. Grazing would help to open up the sward, reduce coarse grass and scrub growth and create lightly trampled/poached areas which will help create areas for seed germination.

The woodlands are apparently unmanaged, although there has been some clearance below aerial wires (Target Note B). The thin strip of dry woodland does not require management as it is very sparse but the denser wet woodland to the west would benefit from some minor woodland management.

4.2 Assessment of habitat management

<u>Mire/Wet heath</u> – Left unmanaged for many years. Recently brought back into management through swaling. Fire breaks cut into open mire to allow smaller sections to be swaled on rotation. Some scrub management has taken place (felling and stump treatment) and this is likely to continue. However the site is not yet in optimum management – as this would require some sort of regular grazing - **Medium**

<u>Bracken</u> – Cut with mulching topper, however cuttings are left on site due to a lack of suitable contractor with a flail collector - **Medium**

Wet Woodlands - Unmanaged, still developing - Medium

The management currently undertaken is very positive, and although in an ideal world more could be done (i.e. grazing, removal of cuttings etc.) the resources available for the management of the site are limited (due to the tussocky nature of the site it has been difficult locating contractors willing to top the site or that have suitable equipment) and the efforts of the council should be applauded as significant headway has already been made at bringing the site into positive management. Hopefully in time the condition will also greatly improve.

The previous report, as well as management suggestions from Beef, Butterflies and Trees and DWT, recommended introducing swaling if grazing was unfeasible, as well as regularly topping bracken, and so far these management recommendations have been followed and it is hoped that the Hemyock Parish Council continue in this vein.





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4.3 Recommendations for future management (please show on map).

Mire/Wet heath

<u>Swaling</u> & cutting – after swaling in 2014 the sward has become much less dense and sward height reduced. However it is considered that only swaling this site will not restore it to the species-rich wet heath it was when surveyed in 1991. Although swaling reduces the cover of purple moor-grass tussocks and dead vegetation it will redevelop at a uniform rate, and purple moor-grass tends to recolonise quickly after being burnt. Ideally one section of the mire (which is currently being separated into sections by firebreaks) could be burnt on rotation every five years or so depending on conditions whilst the others are fenced with electrical fencing and grazed. The firebreaks are currently cut but cuttings have been left in-situ and it is recommended that these are removed to prevent nutrient enrichment as the vegetation breaks down (or burnt on site in a small bonfire if taking it off site is unfeasible – this should be done in the species-poor area to the north-east (Target Note A)). In addition to swaling the purple moor-grass could be topped early in the season (early June), again on rotation, to reduce the vigour of growth. It is recommended that no more two of the portions separated by firebreaks are topped each year to allow some structural diversity within the sward – invertebrates and small mammals will still use the tussocky grass areas – and that the area to be cut is walked beforehand to check for ground nesting birds (if birds are present a different portion could be cut or left alone).

Grazing – It is highly recommended that some thought is given to the possibility of grazing this site, at least at some point in the future. Temporary electric fencing could be erected around portions of the mire which would allow short term grazing with ponies or cattle (although cattle are more likely to break out of electric fencing - smaller cattle such as Dexters may be suitable. Sheep are not suitable for grazing this particular type of habitat) preferably in May-June to inhibit some fresh purple moor-grass growth. This would have the benefit of allowing some areas of mire/heath to develop at differing rates, creating an interesting mosaic of sward heights (the present swaling/cutting regime leaves the mire to develop at a uniform rate and the competitive nature of purple moor-grass will always allow it to develop faster than other species). This would have to be done with permission of Natural England - The Works on Common Land Order 2007 does allow temporary electric fencing for conservation purposes as long as no more than 10% of the common is fenced at any one time and for no more than 6 months. Grazing could occur in small portions of the mire on rotation - enclosing 10% (approx. 1 acre) on a rolling basis. One quarter (one of the four portions separated by fire breaks) could be burnt over winter every five years on rotation and some areas left to develop into slightly more tussocky mire which would allow a variety of sward heights and structural diversity. This mixing of regimes could occur on a year by year rotation so each portion of the mire gets a variety of management. which can be tailored depending on the conditions and progress of mire regeneration. Admittedly this is a complicated arrangement but could be a good way of balancing varying management types, allowing low levels of grazing in a more concentrated area and developing a structurally varied mire/heath habitat. The importance of shorter areas of sward is highlighted on site - one very small patch has a much shorter sward and here was found the most botanical interest with tormentil, ling heather and a single heath spotted orchid present (though botanical interest is still mild - these species would be widespread in many high quality mire/heath sites).

Perhaps a suitable grazier could be found by advertising in the parish magazine?

<u>Seed harvesting or Green hay</u> – if floral diversity does not improve with further management the seed bank could be supplemented by harvesting seeds from a similar donor site with greater botanical diversity. Some light scarifying may need to be done to slightly break up the ground and remove vegetative litter, creating patches for seeds to germinate. Green hay application (spreading a thin layer of hay cut from a species-rich donor site) is a similar idea and could be applied if a suitable donor site could be located.

<u>Bracken</u> – Continue with the cutting of the bracken dominated areas. Ideally bracken should be cut at the height of the growing season (mid-June depending on altitude/seasonal conditions) to have maximum impact but unfortunately this is in the middle of bird nesting season and there is a risk of disturbing and potentially destroying nests and young birds if cut at this time. It is recommended that the bracken is walked before cutting to check for potential nesting areas and either cut once birds have fledged or to focus the cutting on areas where no birds are present, leaving nesting areas alone. The bracken could also be cut twice a year –

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once at the height of growing season, and then again once the bird nesting season is over to catch any remaining areas and hinder any re-growth. Cutting twice a year would inhibit the bracken further and allow other less competitive species to recolonise the ground. As with the mire it is recommended that all arisings should be removed from site following a cut – thatch and plant litter left on site will rot and add excess nutrient in to the ground which will favour competitive species above more delicate plants, and inhibit the botanical diversity that the regime is trying to encourage. A small bonfire could be done on site (in species poor area to north of site (Target Note A) to burn cut bracken which would save the vegetation being taken off site.

<u>Scrub clearance</u> – some scrub is encroaching from the woodland areas. Management through swaling and or grazing can inhibit this but will not entirely suppress it. Some scrub clearance, focusing on young trees, would be beneficial in reducing encroachment into the mire area.

Wet Woodland

<u>Woodland management</u> – this area could be managed by coppicing and selective felling of birch trees, as well as potentially opening up small glades or rides. This would allow more light through to the ground flora and create a much more varied structure within the woodland – important for a number of bird and invertebrate species. Leaving dead wood piles in situ will create additional habitat for small mammals, invertebrates (especially beetles) and fungi. It is also recommended that scrub from downy birch does not spread further into the mire.

It is recommended the thin strip of woodland along the east and south boundary is left unmanaged.

4.4 Note of discussions with landowner (if any) and outcome. Include information about the history of the site and its previous management, any details of ES/ELS/HLS/woodland grant schemes/other, previous management advice given by which organisation and when, whether the landowner wishes to investigate the new CS scheme and which options, any planning applications relating to the site.

Site not in any agri-environment scheme at present time. Site management governed by previous site report (DBRC 2010) and management advice provided by the Devon Wildlife Trust and the Beef, Butterflies & Trees project. Surveyors met relevant members of the Parish Council to get some information about the current management, spoke to 2 local residents who gave their views on the site management and spoke to a DWT member of staff who has had some involvement in the site.

Action for DBRC / surveyor: (e.g. send habitat management advice, previous survey cards, ask NE or FC to contact landowner).

Forward report to DWT reserve team

Has landowner given permission for DBRC to give their contact details to other bodies? Which ones?

No





5. OVERALL SITE EVALUATION:

5.1 Habitats for which the site is currently designated

Compart ment(s)	Habitat	Condition L/M/H	Man'ment L/M/H	Overall assessment	Key reason for not being assessed as green
1	Purple moor-grass & rush pasture/Lowland Heath	L	M/H	М	Loss of species-rich mire/wet heath, little botanical diversity.
2	Wet Woodland	М	М	М	Uniform structure, little ground flora.

5.3 Whole Site assessment (delete as necessary)

Overall condition of site

Overall site management assessment

Medium Site is not in optimum management, minor adjustments required. (Recorded as being in positive management)

5.4 Is the site still of CWS standard and which specific guideline(s) does it meet? (please

reference specific compartments

Compartments(s)	Criterion No.	Text
1	3.5.1	Over 0.5ha of Mire/Lowland heath (M25a with slight affinities with H4 heath)





Shuttleton Common (Mid Devon) Appendix 1. SPECIES LIST

English name	Name (Stace 1999)	Mire/heath	Wood/oth
Common Bent	Agrostis capillaris		LF
Bristle Bent	Agrostis curtisii		LF
Creeping Bent	Agrostis stolonifera		LA
Bugle	Ajuga reptans		0
Vild Angelica	Angelica sylvestris		0
alse Oat-grass	Arrhenatherum elatius		0
Downy Birch	Betula pubescens		D
lard-fern	Blechnum spicant		R
ing	Calluna vulgaris	R	
ledge Bindweed	Calystegia sepium		0
Hairy Bitter-cress	Cardamine hirsuta		0
Common Knapweed	Centaurea nigra		R
Marsh Thistle	Cirsium palustre		0
lazel	Corylus avellana		LF
Cock's-foot	Dactylis glomerata		0
leath Spotted-orchid	Dactylorhiza maculata	R	•
Vavy Hair-grass	Deschampsia flexuosa		0
Broad Buckler-fern	Dryopteris dilatata		0
Cross-leaved Heath	Erica tetralix	LF	0
Beech	Fagus sylvatica		LF
Cleavers	Galium aparine		0
Herb-Robert	Geranium robertianum		0
	Geranium robertianum Geum urbanum		-
Nood Avens			0
Marsh Cudweed	Gnaphalium uliginosum		R
vy	Hedera helix		LF
Hogweed	Heracleum sphondylium		0
Yorkshire-fog	Holcus lanatus		LF
Creeping Soft-grass	Holcus mollis		LF
Bluebell	Hyacinthoides non-scripta		LF
Holly	llex aquifolium		0
Soft-rush	Juncus effusus		0
Honeysuckle	Lonicera periclymenum		0
Greater Bird's-foot-trefoil	Lotus pedunculatus		R
Dog's Mercury	Mercurialis perennis		0
Purple Moor-grass	Molinia caerulea	D	
Timothy	Phleum pratense sens.lat.		R
Scots Pine	Pinus sylvestris		R
Tormentil	Potentilla erecta	R	
Bracken	Pteridium aquilinum	LD	LA
Oak	Quercus sp.		LA
Creeping Buttercup	Ranunculus repens		LF
Bramble	, Rubus fruticosus agg.		LF
Eared Willow	Salix aurita	R	0
Grey Willow	Salix cinerea		0
Red Campion	Silene dioica		R
Rowan	Sorbus aucuparia	R	R
Greater Stitchwort	Stellaria holostea		R
Wood Sage	Teucrium scorodonia		LF
White Clover	Trifolium repens		0
Scentless Mayweed			R
Jeenness Mayweeu	Tripleurospermum inodorum	dlife in Devon	IX .





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English name	Name (Stace 1999)	Mire/heath	Wood/other
Western Gorse	Ulex gallii	LF	
Common Nettle	Urtica dioica		LF
Tufted Vetch	Vicia cracca		R
Common Dog-violet	Viola riviniana		R

DAFOR

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare L = Locally



Shuttleton Common (Mid Devon) Appendix 2: HABITAT MAP



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Map Prepared by Devon Biodiversity Records Centre 2015