

Cornwall Energy Recovery Centre (CERC), Rostowrack Farm, St. Dennis, Cornwall

In respect of the Planning Appeal by SITA Cornwall Ltd

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Planning Inspectorate Reference: APP/D0840/A/09/2113075/NWF

Appendices to Support Proof of Evidence of

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APPENDICES

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APPENDIX 1

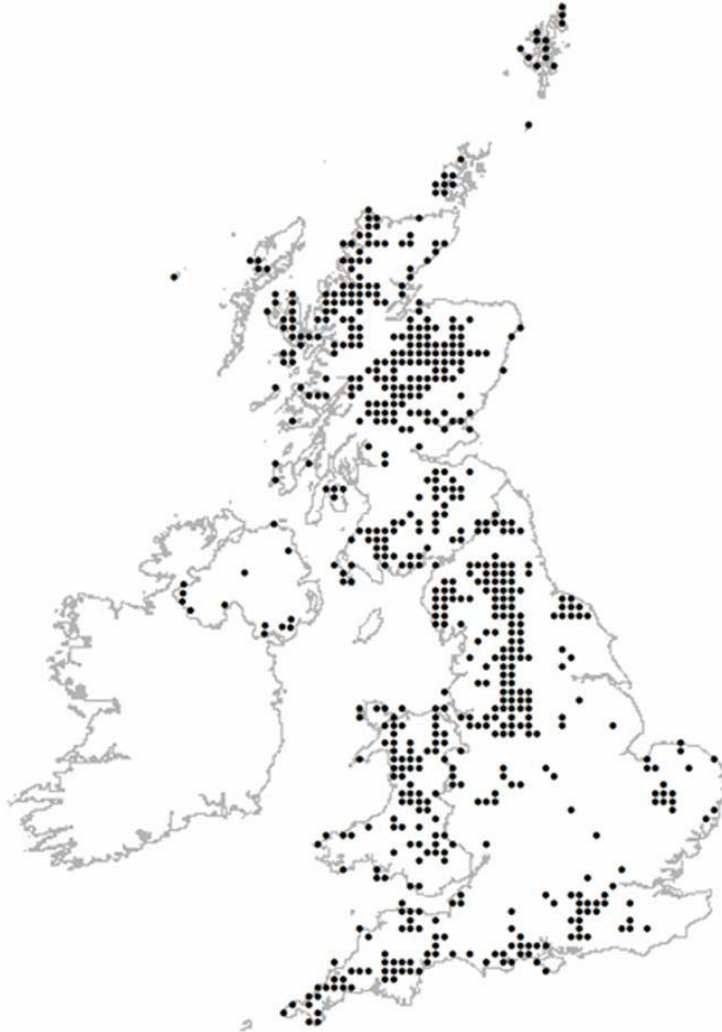


Figure 1. UK Distribution of European dry heaths.

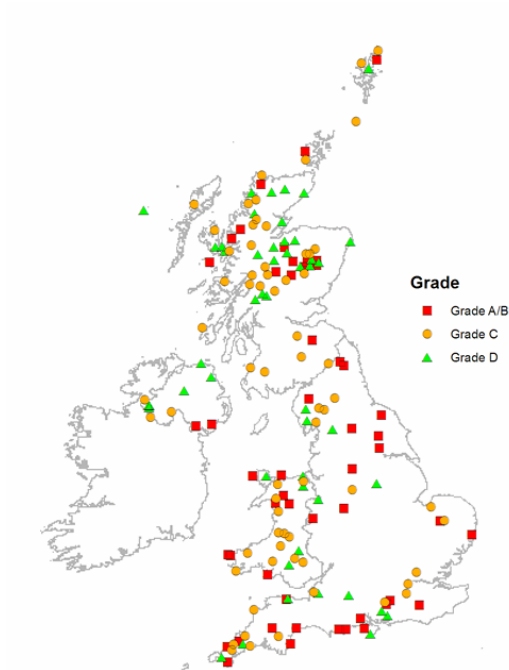
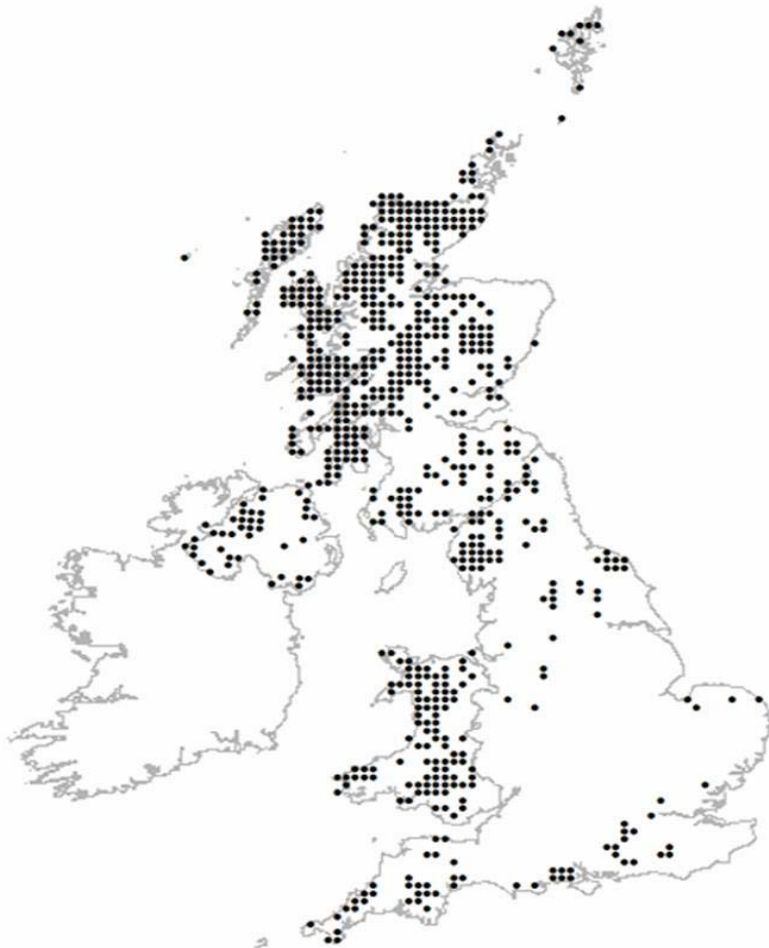


Figure 2. Distribution of UK SACs with European dry heaths.

Explanation of Grades.

- A. Outstanding examples of the feature in a European context.
- B. Excellent examples of the feature, significantly above the threshold for SSSI/ASSI notification but of somewhat lower value than grade A sites.
- C. Examples of the feature which are of at least national importance (i.e. usually above the threshold for SSSI/ASSI notification on terrestrial sites) but not significantly above this. These features are not the primary reason for SACs being selected.
- D. Features of below SSSI quality occurring on SACs. These are non-qualifying features ("non-significant presence"), indicated by a letter D, but this is not a formal global grade.



Appendix 1 Figure 3 UK Distribution of Northern Atlantic wet heaths with *Erica tetralix*.

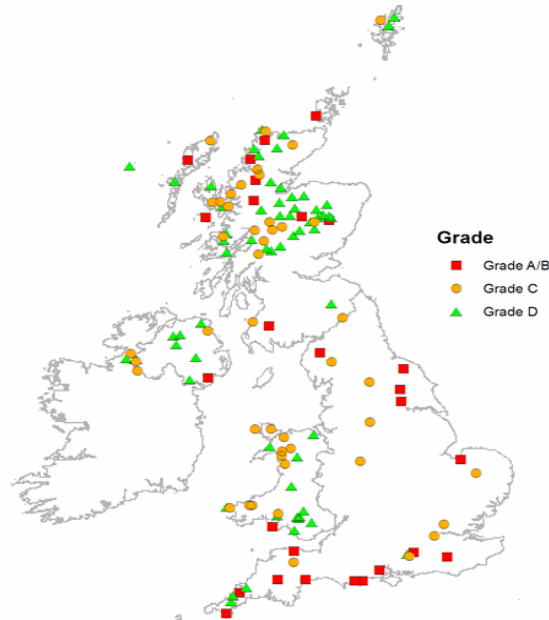


Figure 4 Distribution of SACs with Northern Atlantic wet heaths with *Erica tetralix*.

Explanation of Grades.

- F. Outstanding examples of the feature in a European context.
- G. Excellent examples of the feature, significantly above the threshold for SSSI/ASSI notification but of somewhat lower value than grade A sites.
- H. Examples of the feature which are of at least national importance (i.e. usually above the threshold for SSSI/ASSI notification on terrestrial sites) but not significantly above this. These features are not the primary reason for SACs being selected.
- I.

Features of below SSSI quality occurring on SACs. These are non-qualifying features (“non-significant presence”), indicated by a letter D, but this is not a formal global grade.

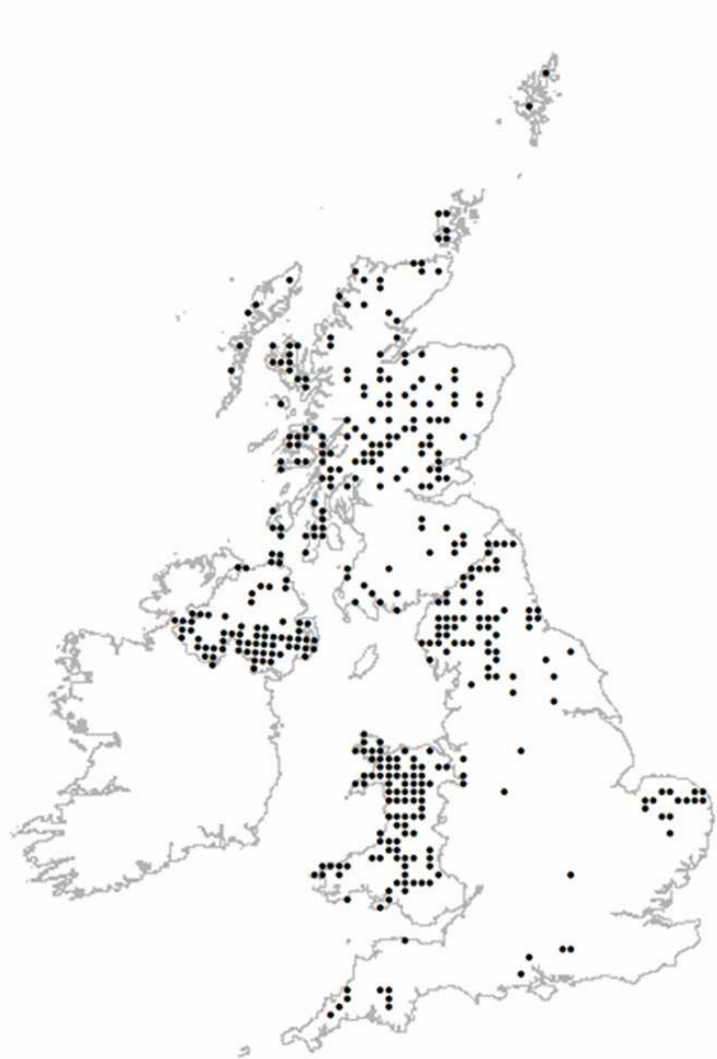


Figure 5. UK Distribution of transition mire and quaking bog habitat.

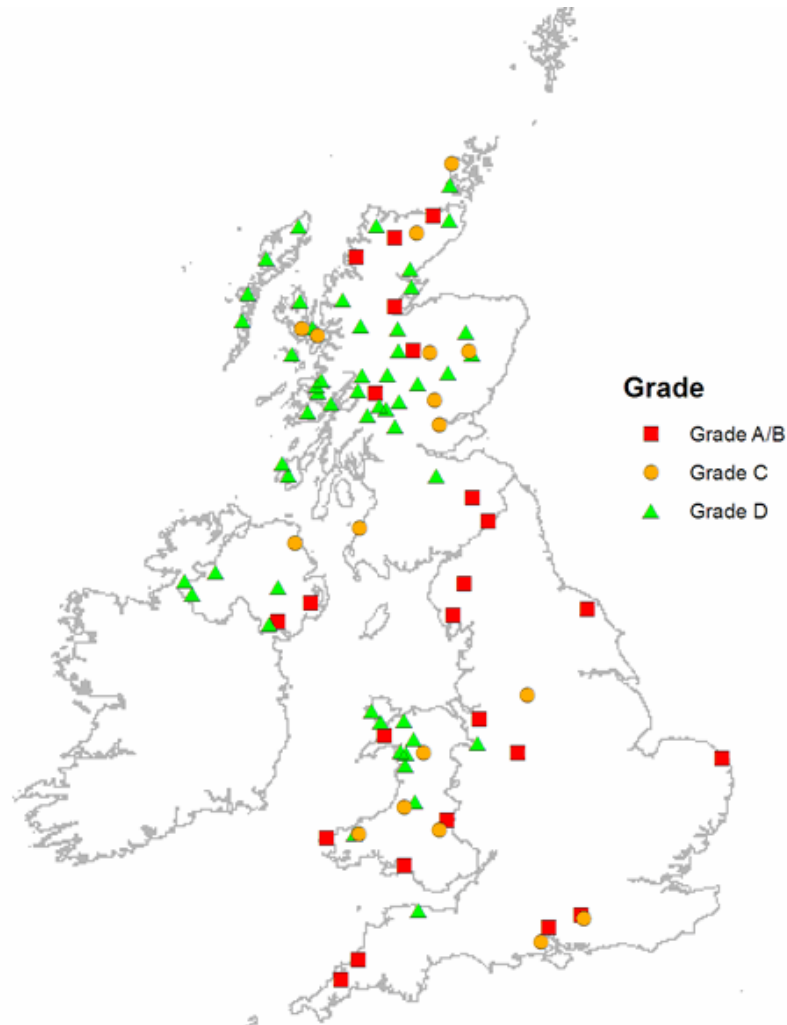


Figure 6. Distribution of SACs with transition mire and quaking bog habitat.

Explanation of Grades.

- J. Outstanding examples of the feature in a European context.
- K. Excellent examples of the feature, significantly above the threshold for SSSI/ASSI notification but of somewhat lower value than grade A sites.
- L. Examples of the feature which are of at least national importance (i.e. usually above the threshold for SSSI/ASSI notification on terrestrial sites) but not significantly above this. These features are not the primary reason for SACs being selected.
- M.

Features of below SSSI quality occurring on SACs. These are non-qualifying features (“non-significant presence”), indicated by a letter D, but this is not a formal global grade.

Appendix 2.1 Condition Assessment for Breney Common, Goss and Tregoss Moors SAC (2009)

Unit Number	Unit Name	Assessment Date	Condition	Management Prognosis	Comments
1	East of A30	4/11/09	Unfavourable	Meeting Objectives	The unit is unfavourable recovering due to lack of bare ground and desirable forbs.
2	Tregoss Moor North	9/6/09	Unfavourable Recovering	Not Meeting Objectives	The site has been extensively damaged fairly recently by several uncontrolled burns.
3	Enniscaven	27/2/03	Favourable	Not Meeting Objectives	Some grazing management of the northern parts of the unit would be beneficial.
4	Gothers	1/3/99	Unfavourable recovering	Meeting objectives	None
5	Tregoss Farm	11/6/03	Unfavourable recovering	Meeting objectives	The unit would benefit from some further scrub control.
6	Tregoss Moor South	4/11/09	Unfavourable recovering	Meeting objectives	The site is unfavourable recovering because of a lack of bare ground, sward composition and frequency or graminoids.
7	Goss Moor North	25/8/04	Unfavourable recovering	Meeting objectives	First year of LIFE scrub management works completed.
8	Goss Moor South	22/10/09	Unfavourable recovering	Not Meeting Objectives	Unit moving towards meeting objectives as extensive cattle grazing, swaling programme, improved access and management plan in place.
9	Carsella farm	20/8/09	Unfavourable recovering	Meeting Objectives	Could benefit from slightly increased grazing pressure.
10	Gaverigan	27/2/03	Unfavourable No Change	Not Meeting Objectives	IMERYs have undertaken clearance works along the disused rail line between Trerice Bridge and Gaverigan Manor without consent.
11	Goss Moor West	8/1/02	Unfavourable declining	Not Meeting Objectives	Since the cessation of grazing on the land it is becoming increasingly scrubbed up.
12	North of A30 West	25/11/09	Unfavourable recovering	Meeting Objectives	None

13	North of A30 East	31/3/05	Unfavourable recovering	Meeting Objectives	Boundary fencing works have now been completed making the unit stockproof.
14	Royalton	20/9/01	Unfavourable recovering	Not Meeting Objectives	Part of the unit urgently requires some grazing and remains in unfavourable declining condition.
15	Belowda	4/11/09	Unfavourable recovering	Meeting Objectives	The site is unfavourable recovering because of sward structure.
16	Whole Standing Water	Site 29/6/00	Unfavourable declining	Not Meeting Objectives	A number of areas of open water on the site are gradually becoming silted up.
17	Whole Running Water	Site 29/6/00	Unfavourable Recovering	Meeting Objectives	The introduction of a series of stop weirs in the late 1990's along the course of the River Fal has reduced the scouring and deeping of the river bed to the benefit of the watercourse and the adjoining wetland areas.
18	Railway	14/10/09	Unfavourable Declining	Not Meeting Objectives	Hyperichum undulatum present but Pilularia globulifera no longer present due to lack of grazing and associated poaching on margins of wet areas.
19	Tregonhay	1/4/05	Unfavourable Recovering	Meeting Objectives	Boundary fencing is now complete which will allow grazing to commence.

Appendix 2.2 Condition Assessment for St Austell Clay Pits SAC (2009)

Unit Number	Unit Name	Assessment Date	Condition	Management Prognosis	Comments
1	Trethosa	27/3/09	Unfavourable Declining	Not Meeting Objectives	55cm ² of Marsupella profunda overall, marked decrease since April 2007 due to increase of other vegetation cover on low ridge and absence from boulders on flay ground south of ridge.
2	Prosper	27/3/09	Unfavourable Declining	Not Meeting Objectives	430 cm ² of Marsupella profunda overall. Upper ridge now much shaded, with ca 50 cm ² surviving only at west end.
3	Baal	27/3/09	Unfavourable Declining	Not Meeting Objectives	800 cm ² of Marsupella Profunda overall, only 40 cm ² remaining within SSSI despite extensive Rhododendron clearance. Increased moss partly to blame for decline.

Appendix 3.1 Conservation Objectives Breney Common and Goss and Tregoss Moors SAC

INTEREST FEATURE	CONSERVATION OBJECTIVE	POSSIBLE EFFECT
Habitat Feature Habitat Extent Objective		
Dwarf shrub heath – lowland	There should be no reduction in the total extent (area) of heathland, including any associated pools and transitional communities, in relation to the established baseline.	Deterioration in extent of habitat
H4 communities Fen, marsh and swamp	Maintain extent (from 1988 notification) with particular reference to breeding bird assemblage and the following European interest features: European dry heaths and North Atlantic wet heaths with <i>Erica tetralix</i> There should be no reduction in the total combined extent of wetland in relation to the established baseline.	Deterioration in extent of habitat
M14, M21, M23, M25, M27, M28, M29, S27, W1	Maintain extent of habitat mosaic (from 1988 notification) with particular reference to the following European interest features: Transition mires and quaking bogs and <i>Eurodryas aurinia</i> Maintain habitat mosaic to support assemblages of breeding birds, invertebrates and vascular plants. The target is to achieve an uneven patchwork of short and long vegetation with a mosaic of open, low growing areas dominated by bog mosses, through wet heath to ranker grassland and sedges with flowering herbs and scrub patches. Maintain willow carr/scrub at present levels.	
Assemblages of breeding birds – lowland heathland, scrub, fen and wet woodland	Maintain the area of habitats that are used by the feature in the site within acceptable limits. Extent of all habitats used by the feature should be maintained – there should be no loss of habitat, subject to natural change. Scrub extent should not increase or encroach into other habitats.	Deterioration in extent of habitat
Outstanding Dragonfly assemblage	No more than 25% reduction of core larval habitat area from original baseline. Each water body to have between 15% and 40% emergent vegetation 30 – 50% in the shallower parts of the water body (<30cm) A maximum of 25-30% over waterbodies Varied habitat structure of site	Deterioration in extent of habitat
Species Feature Species Population Objective		
Invertebrate assemblage	Using defined invertebrate sampling protocols, thresholds to be met: F21 grassland & scrub matrix BAT SQI score = 160	Deterioration in population
Field layers F21 grassland & scrub matrix Outstanding Dragonfly Assemblage	Maintain assemblage either as at notification or with at least 15 breeding species confirmed as present within any 3 year period. It is desirable, but not essential for maintenance of Favourable Condition that the Nationally scarce <i>Ceriagrion tenellum</i> (Small Red Damselfly) and <i>Coenagrion pulchellum</i> (Variable Damselfly) are present.	Deterioration in population
Assemblages of breeding birds – Lowland heath	Maintain assemblage diversity at no less than 75% of the original assemblage score of 18.5	Deterioration in population
Assemblages of breeding	Maintain assemblage diversity at no less than 75% of the original assemblage scores of 23 and 46	Deterioration in population

birds – scrub, fen and wet woodland
Marsh Fritillary

Species should be present within site.

Deterioration in population

Potential for indirect impacts of altered water levels to impact the marsh fritillary through loss of habitat caused by an alteration in the distribution of habitat types
Deterioration in population
Deterioration in population

Silver studded blue Vascular assemblage

plant

Species should be present within site.
The 6 species that should be present are:-
Cicendia filiformis Yellow Centaury NS 50
Sibthorpia europaea Cornish Moneywort NS 50
Hypericum undulatum Wavy-leaved St John's Wort NS 50
Ranunculus tripartitus Three-lobed Crowfoot NS 50
Pilularia globulifera Pillwort NS 50
Lycopodiella inundatum Marsh Clubmoss NS 50

Erica ciliaris Dorset Heath – found 1994 post designation feature.

Criteria Feature	Favourable Condition Objective	
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Lowland dry and wet heathland & *Erica ciliaris*

At least 1% but not more than 10% cover of the area of the feature should consist of :-
Dry Heath - firm, sunlit, horizontal, sloping or vertical, exposed bare ground, with no more than 1% heavily disturbed.
Wet Heath - muddy exposed bare ground.
Dwarf shrub cover 25-90%

Deterioration in quality of habitat

Lowland dry heathland & *Erica ciliaris*

Dry Heath only - total *Ulex* and/or *Genista* spp. cover <50%, with *Ulex europaeus* <25%

Deterioration in quality of habitat

Lowland dry and wet heathland & *Erica ciliaris*

Dry Heath:
Pioneer phase (including pseudo-pioneer): 10-40%;
Building/mature phase: 20-80%;
Degenerate phase: <30%;
Dead: <10%, of total ericaceous cover.
Wet Heath:
Presence of heather in all stages of growth. No one growth form should be dominant.
At least two species of dwarf shrubs present and at least frequent. Dwarf-shrubs include:
Dry Heath:
Arctostaphylos uva-ursi, *Calluna vulgaris*, *Empetrum nigrum*, *Erica ciliaris*, *E. cinerea*, *E. tetralix*, *E. vagans*, *Genista anglica*, *G. pilosa*, *Ulex gallii*, *U. minor*, *Vaccinium myrtillus*, *V. vitis-idaea* (and hybrids).
Wet Heath:
Calluna vulgaris, *Erica ciliaris*, *E. cinerea*, *E. tetralix*, *E. vagans*, *Ulex gallii*, *U. minor*, *Vaccinium* spp.

Deterioration in quality of habitat

At least 1 species at least frequent and 2 species at least occasional throughout the sward. Graminoids include:

Dry Heath

Agrostis spp., *Ammophila arenaria*, *Carex* spp., *Danthonia decumbens*, *Deschampsia flexuosa*, *Festuca* spp., *Molinia caerulea*, *Nardus stricta*, *Trichophorum cespitosus*

Deschampsia flexuosa and *Nardus stricta* no more than occasional and <25% cover.

Wet Heath

Carex panicea, *Carex pulicaris*, *Eleocharis* spp., *Eriophorum angustifolium*, *Juncus acutiflorus*, *Juncus articulatus*, *Molinia caerulea*, *Rhynchospora alba*, *Schoenus nigricans*, *Trichophorum cespitosum*.

Molinia no more than occasional and *Schoenus* at least occasional when naturally present.

At least 2 species at least occasional throughout the sward Desirable forbs include:

Dry Heath:

Armeria maritima, *Galium saxatile*, *Genista anglica*, *Hypochaeris radicata*, *Lotus corniculatus*, *Plantago lanceolata*, *Plantago maritima*, *Polygala serpyllifolia*, *Potentilla erecta*, *Rumex acetosella*, *Scilla verna*, *Serratula tinctoria*, *Thymus praecox*, *Viola riviniana*.

Wet Heath:

Anagallis tenella, *Drosera* spp., *Galium saxatile*, *Genista anglica*, *Myrica gale*, *Narthecium ossifragum*, *Pinguicula* spp., *Polygala serpyllifolia*, *Potentilla erecta*, *Serratula tinctoria*, *Succisa pratensis*.

Dry Heath:

% cover maintained or increased (when naturally present)

Wet Heath:

>10% cover of *Sphagna* (if naturally present)>5% cover of lichens (if naturally present)

Dry Heath:

<1% of habitat heavily eroded.

Wet Heath:

<1% of habitat showing signs of trampling/paths

No silt or leachate

No artificial drains

<1% exotic species

< 1 % ragwort, nettle, thistles and other herbaceous spp

Dry Heath:

Cirsium arvense, *Digitalis purpurea*, *Epilobium* spp. (excluding *E. palustre*)

Chamerion angustifolium, *Juncus effusus*, *J. squarrosus*, *Ranunculus* spp., *Senecio* spp., *Rumex obtusifolius*, *Urtica dioica*, 'coarse grasses'.

Wet Heath:

Apium nodiflorum, *Cirsium arvense*, *Digitalis purpurea*, *Epilobium* spp. (excl. *E. palustre*), *Glyceria fluitans*, *Juncus effusus*, *J. squarrosus*, *Oenanthe crocata*, *Phragmites* spp., *Ranunculus repens*, *Fallopia japonica*, *Senecio jacobaea*, *Rumex obtusifolius*, *Typha* spp., *Urtica* spp.

% Tree and Scrub cover:

Dry Heath:

< 15% trees & scrub Tree and scrub spp

include: *Betula* spp., *Prunus spinosa*, *Pinus* spp., *Rubus* spp., *Sarothamnus scoparius*, *Quercus* spp., *Hippophae rhamnoides*

Wet Heath:

< 10% trees & scrub Tree and scrub spp include: *Alnus glutinosa*, *Betula* spp., *Pinus* spp., *Prunus spinosa*, *Quercus* spp., *Rubus* spp., *Salix* spp.

% Bracken Cover:

Dry Heath:

<10% bracken (dense canopy)

Wet Heath:

<5% bracken (dense canopy)

Ulex cover:

Wet Heath only -

<10% *Ulex europaeus*

Acrocarpus mosses

<occasional

Silver-studded Blue Flowers present in at least 50% of paces. Deterioration in quality of habitat
Plebejus argus

Fen, marsh and swamp Food plant species frequent or abundant. Deterioration in quality of habitat
As a generic standard, total extent across the area assessed should be no more than 10%. Higher covers of between 5% (min) and 25% (max) should be considered for those communities listed under comments. Higher upper thresholds may also be appropriate locally.

M14, M21, M23, M25, M27, M28, M29, S27, W1 Discretionary attribute:
Targets should be set to register high or increasing litter cover as unfavourable. As a generic standard, total extent across the area assessed should be no more than 25% cover. Lower thresholds may be appropriate for some communities – e.g. short-sedge mires (M9, M13, etc.).

Sibthorpia europaea,
Hypericum undulatum
and

Pilularia globulifera

No loss of the component types.

At the very least the frequencies of positive indicators should confirm the presence of the target communities. A decrease in frequency of site-specific positive indicators is undesirable.

Local targets to register an increase or decrease in the extent of key communities are defined as follows:

M14 Fen community:

Schoenus nigricans, *Molinia caerulea*: tussock cover between 10% and 70% with *Schoenus* predominating.

Sphagnum subnitens, *S. Denticulatum*, *Campylium stellatum*, *Aneura pinguis*, *Scorpidium scorpioides*: at least one *Sphagnum* and one 'brown' moss constant, combined cover >20%.

Associated species:

Narthecium ossifragum, *Anagallis tenella*, *Drosera rotundifolia*, *Eriophorum angustifolium*, *Rhynchospora alba*, *Eleocharis multicaulis*, *Erica tetralix*: at least 3 species constant

M21 Valley/basin fen community:

Sphagnum papillosum and/or *S. magellanicum*: cover >70% in 80% of samples.

Sphagnum denticulatum, *S. cuspidatum*, *S. fallax*, *Odontoschisma sphagni*: at least one species at least occasional.

Associated species:

Calluna vulgaris, *Drosera rotundifolia*, *Erica tetralix*, *Eriophorum angustifolium*, *Molinia caerulea*, *Narthecium ossifragum*, *Rhynchospora alba*: at least 3 species constant.

M25 Fen Meadow/rush pasture:

The frequencies of positive indicators should at the very least, confirm the presence of the target community. A decrease in positive indicator species of >20% is unfavourable:

Angelica sylvestris, *Calluna vulgaris*, *Carum verticillatum*, *Centaurea nigra*, *Erica tetralix*, *Eupatorium cannabinum*, *Filipendula ulmaria*, *Mentha aquatica*, *Narthecium ossifragum*, *Orchidaceae* spp., *Pedicularis sylvatica*, *Potentilla erecta*, *Serratula tinctoria*, *Sphagnum* spp., *Succisa pratensis*, *Viola palustris*, *Valeriana dioica*,
V. officinalis.

S27 Tall-herb fen:

Either - *Carex rostrata*, *C. vesicaria*, *C. nigra*, *C. elata*, *C. aquatilis*, *C. appropinquata*, *Eriophorum angustifolium*: combined cover >25%
Or - *Phragmites australis*, *Juncus effusus*: combined cover >25%

Potentilla palustris, *Menyanthes trifoliata*, *Equisetum fluviatile*: individually or together combined cover >25%
Calliergonella cuspidata, *Calliergon cordifolium*, *C. giganteum*: at least one species at least rare

Associated species:

Galium palustre, *Cardamine pratense*, *Epilobium palustre*, *Mentha aquatica*, *Myosotis laxa*, *Caltha palustris*, *Hydrocotyle vulgaris*, *Veronica scutellata*, *Lysimachia vulgaris*: at least 3 species constant

(a) Invasive non-native species should be absent, or no more than rare if present

b) Target should be set to register high or increasing frequency/cover of other undesirable spp. as unfavourable.

M14 Fen communities:

Graminoids – *Phragmites australis*, *Phalaris arundinacea*, *Glyceria maxima*, *Molinia caerulea*; Tall herbs – *Epilobium hirsutum*, *Urtica dioica*, *Pteridium aquilinum*, *Rubus fruticosus*;
Bryophytes - *Brachythecium rutabulum*, *Eurhynchium praelongum*:
Not more than one species and that species no more than rare and <5% cover.

M21 Valley/basin fen community:

1. Graminoids – *Phragmites australis*, *Phalaris arundinacea*, *Glyceria maxima*;
Tall herbs – *Epilobium hirsutum*, *Urtica dioica*; Bryophytes - *Brachythecium rutabulum*, *Eurhynchium praelongum*:
Not more than one of this group of species and that <5% cover.

2. Graminoids – *Molinia caerulea*;
Tall herbs – *Pteridium aquilinum*, *Rubus fruticosus*:
Not more than one of this group of species and that <5% cover.

M25 Fen Meadow/rush pasture:

Graminoids – *Phragmites australis*, *Phalaris arundinacea*, *Glyceria maxima*; tall herbs – *Epilobium hirsutum*, *Urtica dioica*, *Pteridium aquilinum*, *Rubus fruticosus*; bryophytes - *Brachythecium rutabulum*, *Eurhynchium praelongum*: singly or in combination <5% cover.

S27 Tall-herb fen:

Graminoids – *Phragmites australis*, *Phalaris arundinacea*, *Glyceria maxima*; tall herbs – *Epilobium hirsutum*, *Urtica dioica*: no more than one species present and that <5% cover.

Pteridium aquilinum, *Rubus fruticosus*, *Molinia caerulea* – no more than one species present and that <5% cover.

As a generic target for open fen (excluding wet woodland), woody species (including *Betula*, *Salix*, *Rhododendron*, *Pinus*, other gymnosperms) should be no more than scattered, predominantly <1.5m high.

Cover should be <10% on open fen. Saplings/ seedlings should be no more than rare. None of these species should be present on flushes &

<p>Vascular plant species of ephemeral ponds, ruts and puddles (Suite 11) –</p>	<p>springs, although Salix is acceptable at least 5m from petrifying springs. Sufficient area of suitable habitat to maintain population.</p>	<p>Deterioration in quality of habitat</p>
<p><i>Cicendia filiformis</i> Yellow Centaury</p>	<p>No net loss of area or length of suitable habitat Scruffy margins < 5% cover provided by species other than the target species</p>	
<p>Three-lobed Crowfoot <i>Ranunculus tripartitus</i></p>	<p>Absence of scrub and tall grass</p>	
<p>Marsh Clubmoss <i>Lycopodiella</i></p>	<p>Evidence of poaching or regular disturbance</p>	
<p>Outstanding dragonfly assemblage</p>	<p>Signs of flooding or direct evidence of dampness in winter 3 or more different surfaces and layers present in at least 20% of SRSs.</p>	<p>Deterioration in quality of habitat</p>
<p>(Proxy habitat table used = ponds, pools, ditches, reens and lakes)</p>	<p>Single surface / layer present in no more than 5 out of 10 SRSs. Preferred features are micro-habitat features which should always be targeted during an assessment. These should be recorded and mapped.</p>	
<p>Invertebrate assemblages of F21 grassland and scrub matrix</p>	<p>Single surface present in no more than 50% of SRSs 3 + different surfaces present in at least 20% of SRSs. Surfaces 3 and 4 present, preferably in all or nearly all SRSs. Surface 1 present in 10% of SRSs Surface 5 present in 10% of SRSs, if appropriate.</p> <p>Following preferred features present: -Scrub patches and margins, including small areas or mosaic with wet woodland -Pools and pool margins -Paths, tracks and their margins -Localised poaching with water filled hoof prints and wet bare substrate. -Flowery areas, including those on other habitats (verges, ruderal etc) including 'unwelcome' weeds such as ragwort and thistles.</p>	<p>Deterioration in quality of habitat</p>
<p>Marsh Fritillary <i>Eurodryas aurinia</i></p>	<p>Following negative factors absent or rare: -Change from grazing to mowing -Closure and coalescence of scrub patches to > 20% cover -Excess grazing leading to loss of flowers or winter structures (seed heads – standing dead stems) -nvasive spp: balsams <i>Impatiens</i> spp. Flowers present in at least 50% of paces.</p> <p><i>Succisa pratensis</i> in at least 80% of paces. No more than 25% reduction in abundance</p> <p>Larval web present in at least 30% of paces.</p> <p>Maximum 10% cover in groups or short belts</p> <p>8 – 20 cm during May - September</p>	<p>Deterioration in quality of habitat</p>

Appendix 3.2 Conservation Objectives St Austell Clay Pits SAC

INTEREST FEATURE	CONSERVATION OBJECTIVE	POSSIBLE EFFECT
Habitat Feature	Habitat Extent Objective	
Inland Rock – active china clay quarries and spoil tips	<p>Maintain extent of suitable habitat for <i>Marsupella profunda</i> (Western Rustwort) from baseline (2000).</p> <p>Maintain existing surfaces free from encroachment or over-shading by vascular plants. No more than 20% of the site (areas identified as potentially suitable habitat for <i>M. profunda</i>) to be dominated by scrub species such as European gorse, birch, blackthorn, hawthorn and willow.</p> <p>Increase availability of habitat potentially suitable for colonisation by <i>M. profunda</i> –boulders of crumbly, mica-rich granite, clay spoil. As a pioneer species of newly exposed clay waste surfaces, requiring open conditions with little competition, proactive site management is needed to ensure that adequate suitable habitat is maintained.</p> <p>Site dossier to define extent of potentially suitable habitat for <i>Marsupella profunda</i>.</p>	Deterioration in extent of habitat
Species Feature	Species Population Objective	
<i>Marsupella profunda</i> Western Rustwort	<p>To maintain populations <i>Marsupella profunda</i> at all three units/subsites from baseline (1999/2000).</p> <p>The SSSI, covering three spatially isolated <i>M. profunda</i> subpopulations, is very small (0.61ha) and consequently inadequate to encompass a functioning metapopulation. However, as areas that support known subpopulations (which therefore act as sources for dispersal of spores), it is important to maintain favourable conditions within each sub-unit. (R. Porley, 2007).</p> <p>To maintain these sites to ensure that populations in them can serve as sources for colonisation of new habitat that needs to be created to maintain a regional 'metapopulation'.</p>	Deterioration in population
Criteria Feature	Favourable Condition Objective	
<i>Marsupella profunda</i> – Western Rustwort	<p>Sufficient area of suitable habitat to maintain populations:-</p> <p>Suitable habitat for <i>M. profunda</i> comprises open/ bare surfaces such as moist, crumbling, mica-rich granite and clays. Requires open conditions with no competition or shading.</p> <p>No loss of area supporting interest features.</p>	Deterioration in quality of habitat
Bryophyte species of quarries and pits (Special habitat 24)	<p>Areas to be assessed (accessible areas supporting interest feature and suitable habitat patches) are predominantly open with at least 80% bare ground. Other pioneer bryophytes, scattered seedlings and grasses are present but at a low level and not out-competing <i>M. profunda</i>. Bare ground includes thin algal crusts, rocks, stones and clayey substrates (china clay wastes).</p> <p>Associated species such as <i>Nardia scalaris</i>, grasses and seedlings or immature plants of gorse, birch, willow, bramble and rhododendron at no more than 10% cover.</p>	Deterioration in quality of habitat
<i>Marsupella profunda</i> – Western Rustwort	<p>Rock surfaces, granitic boulders and areas of bare ground or clay spoil where <i>M. profunda</i> grows or has the potential to grow should not be shaded by gorse, heather, bramble, rhododendron willow or birch. These species can rapidly shade out <i>M. profunda</i> over a short period of time.</p> <p>No evidence of inappropriate levels of recreational activities.</p>	Deterioration in quality of habitat
Bryophyte species of quarries and pits (Special habitat 24)	<p>No tipping on areas that support <i>M. profunda</i>. This includes china clay waste and mica sand, and chippings from cleared scrub. Cleared vegetation should be removed from the site.</p>	