# BRISTOL SNCI FAVOURABLE CONDITION ASSESSMENT

SITE NAME: TROOPER'S HILL

LOCATION: ST GEORGE, EAST BRISTOL

GRID REFERENCE: ST628731

SURVEY DATE: 02/08/2005

WEATHER: HOT AND DRY

This report contains confidential data

BRERC Ashton Court Visitors Centre Ashton Court Estate Long Ashton Bristol BS41 9JN

August 2005



#### 1 INTRODUCTION

BRERC have been commissioned by Bristol City Council to conduct a field survey of the SNCI located at Troopers Hill, as part of the BCC SNCI Audit- Favourable Conservation Status assessments. This is to include a full botanical survey of the grassland communities found on site and incidental notes of the species composition and status of the woodland and scrub areas.

The results of the botanical survey will then be treated with a statistical analysis devised by Phil Quinn 2004 <sup>1</sup> on behalf of Bristol City Council to produce a numerical score for each community of plants on site. This score will lead to a final grading of each community of A (excellent) – D (Poor), with favourable management of the site being indicated by a + symbol and unfavourable management by a - symbol.

The site lies in Eastern Bristol and overlooks the River Avon to the South West (see **Figure 1**). It is part of a cluster of important wildlife sites, which includes Dundridge Wood, Crew's Hole, Eastwood Farm and the River Avon itself. Together these sites form a wildlife corridor linking the city to wildlife sites further east along the River Avon.

Industrial activity on and around Troopers Hill during the nineteenth century and early twentieth century has had a profound impact upon the appearance and ecology of the site.

The site is a Local Nature Reserve (designated in1995) and the chimney with associated tunnel is a Grade 2 listed structure.

Access to the site is open and unrestricted to pedestrians. The main access points to the site are from Troopers Hill Road, the corner of Troopers Hill Road and Greendown and the north western corner of the site.

Bristol City Council and local group Friends of Troopers Hill have prepared a Local Nature Reserve Management and Action Plan in 2004. This can be accessed via the groups website <a href="https://www.troopers-hill.org.uk">www.troopers-hill.org.uk</a>. Where useful for the purposes of this report reference has been made to this document.

#### 2 SURVEY

Species in **bold** are notable in the BRERC region. Other notable features are also in **Bold**.

#### 2.1 Landform

The highest point of Troopers Hill is 254ft above sea level. The Hill is made up of pennant sandstone interbedded with small seams of mudstone, fireclays and coal. In places the coal seams outcrop on the surface of the hill. These rocks have weathered to produce thin free-draining acidic soils.

Much of the site has developed extremely thin and impoverished soils. The site as a whole is very exposed but gullies and depressions on the site give sheltered conditions in places.

#### 2.2 Surrounding land

The site is surrounded by housing to the south and west. To the east a new housing development now separates the site from the River Avon beyond and dense scrub characterises the post industrial land of Crew's Hole. To the north lie disused allotment gardens and an area of amenity grassland.

All of the site falls within the Forest of Avon Community Forest

#### 2.3 Habitat Overview

Open sward of small tussocky grasses with an abundance of forbs showing an affinity with NVC U1 Festuca ovina – Agrostis capillaris – Rumex acetosella grassland. Healthy mosaic of lowland dry dwarf shrub heath. Scrub varying in height scattered across the site and small patches of Bracken Pteridium aguilinum.

**Please note:** The survey methodology did not include quadrat surveying techniques and the determination of NVC community types are subjective judgements of the surveyors based on field observations made on the day of survey only.

#### 2.4 Habitat Description

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The most extensive vegetation type on the hill comprising abundant species **Wavy Hair-grass Deschampsia flexuosa**, Sheep's Fescue *Festuca ovina* and Mouse-ear Hawkweed and frequent **Velvet Bent Agrostis canina**, Common Bent Agrostis capillaris, False )atgrass Arrhenatherum elatius, **Heath Grass Danthonia decumbens**, Yorkshire fog *Holcus lanatus*, Sheep's Sorrel *Rumex acetosella*, **Goldenrod Solidago virgaurea** and Ribwort Plantain *Plantago lanceolata*. Where slopes are steep and soil stony and thinner, vegetation is more sparse, and there is frequent **Early Hair-grass Aira praecox** and acrocarpus mosses Bristly Haircap *Polytrichum piliferum* and Juniper Haircap *P. juniperinum*.

**Heather** *Calluna vulgaris* and **Bell Heather** *Erica cinerea* provide a mosaic of sub shrubs with fairly extensive areas found upon the southwest facing slopes of the hill.

To the north of the site where the soil is richer taller grassland is present and dominated by False Oat-grass and Cock's-foot *Dactylis glomerata* with stands of Rosebay Willowherb *Chamerion angustifolium*.

Light scrub dominated by Broom *Cytisus scoparius*, Gorse *Ulex europaeus* and Bramble *Rubus fruticosus agg* is scattered across the site and is particularly found upon the west facing slopes where associated herbaceous species include Bracken *Pteridium aquilinum* and Wood Sage *Teucrium scorodonia*.

Other notable plants occurring at low frequency are **Heath Bedstraw** *Galium saxatile* scattered across the site, **Buck's-horn Plantain** *Plantago coronopus* found near the chimney, single plant of **Greater Lettuce** *Lactuca virosa* near one of the exits, blocks of

Rock Stonecrop Sedum fosterianum, two small patches of Knotted Clover Trifolium striatum and Rat's-tail Fescue Vulpia myuros rare on the steep slopes.

Dense scrub is growing predominantly along the western slopes where the boundary with Crew's Hole woodland. This scrub is dominated mainly by Hawthorn *Crataegus monogyna*, Goat Willow *Salix caprea*, English Oak *Quercus robur* and Turkey Oak *Quercus cerris* 

Japanese knotweed Fallopia japonica is present in the northwest corner of the site.

#### 2.5 Boundaries

The site is bounded by fencing and scrub alongside Troopers Hill Road. To the north a relict hedge line and domestic garden fencing act as boundaries. A section of boundary within dense scrub bordering Crews Hole Woodland was not surveyed

#### **3 MANAGEMENT**

No management work is known to have been carried out between the 1930s and 1991. The management of the site has been addressed by the preparation and agreed undertaking of the Troopers Hill Local Nature Reserve Management and Action Plan April 2004 – March 2009 by Bristol City Council and the Friends of Troopers Hill.

This document contains rationale and schedules of work to be carried out for the next five years.

#### 4 FACTORS AFFECTING THE SITE

#### 4.1 Public Use

The site is very well used for informal recreation by the public. The Friends of Troopers Hill group have monitored public use by survey during 2003 and have shown that the majority of people questioned visited the site more than once a week.

#### 4.2 Educational Value/Amenity

This is obviously very high with school group visits being arranged through Bristol Parks' Local Nature Reserve Officer.

There are interpretive boards on site and a series of work party days and events are communicated to members of the group through the group's website and regular news letters.

#### 4.3 Threats

Providing apparent current ownership and management regimes, as outlined in the Troopers Hill Local Nature Reserve Management and Action Plan April 2004 – March 2009 are maintained the favourable status of this SNCI is not likely to decline.

The presence of Japanese Knotweed on site may affect any proposed site activities and management and may need a written Control Strategy in order to fulfil Duty of Care responsibilities under Section 34 of The Environmental Protection Act 1990. Left unmanaged its invasiveness may accelerate the deterioration of the valuable ecological receptors on site. Guidance can be sought from the Environment Agency as statutory consultee.

## 5 RECOMMENDATIONS ON SITE STATUS AND SITE BOUNDARIES

#### 5.1 Site status, including SNCI Favourable Status assessment

The application of the SNCI Favourable Status assessment methodology to the acidic grassland on this site results in the community being awarded 77 points and is therefore grade A site. Current management practices are supporting the communities on this site.

An overall grade of A+ is assigned to this site

#### 5.2 Site boundary changes

No changes recommended.

#### **6 SPECIES RECORDED ON SITE**

## 6.1 Species entered onto the BRERC species database

Notable species are emboldened.

DAFOR – Dominant/Abundant/Frequent/Occasional/Rare on area (only some species have been given a DAFOR rating, mostly only those frequent, abundant or dominant for scoring purposes) – L = locally eg. LD = locally dominant.

UKAP -	Currently listed as having a UK Biodiversity Action Plan (UK BAP Species)
SWAP -	Currently listed in South West Biodiversity Action Plan (SW BAP Species)
Avon -	Currently listed in Avon Biodiversity Action Plan
Bnes -	Currently listed in Bath and North East Somerset Biodiversity Action Plan
Bristol -	Currently listed in Bristol Biodiversity Action Plan
NSom -	Currently listed in North Somerset Biodiversity Action Plan
SGlos -	Currently listed in South Gloucestershire Biodiversity Action Plan
SOCC -	Currently listed as a UK Species of Conservation Concern

## **Troopers Hill ST628731**

Common Name	Scientific Name	Abund.	UKAP	SWAP	Avon	Bnes	Bristol	NSom	SGlos	Socc
Buzzard	Buteo buteo	pre			~	_	_	_	o,	<b>√</b>
Greenfinch	Carduelis chloris	pre			$\checkmark$					$\checkmark$
Woodpigeon	Columba palumbus	pre								
Raven	Corvus corax	pre								
Jay	Garrulus glandarius	pre								
Blue Tit	Parus caeruleus	pre			$\checkmark$					$\checkmark$
Willow Warbler	Phylloscopus trochilus	pre			$\checkmark$					$\checkmark$
Magpie	Pica pica	pre								
Bullfinch	Pyrrhula pyrrhula	pre	$\checkmark$		$\checkmark$	$\checkmark$				
Wren	Troglodytes troglodytes	pre								
Blackbird	Turdus merula	pre								
Long-winged Conehead	Conocephalus discolor	pre			✓	✓				
Ringlet	Aphantopus hyperantus	2								
Holly Blue	Celastrina argiolus britanna	2								
Small Heath	Coenonympha pamphilus pamphilus	1								
Small Copper	Lycaena phlaeas eleus	1								
Meadow Brown	Maniola jurtina	10								
Large White	Pieris brassicae	6								
Common Blue	Polyommatus icarus	4								
Gatekeeper	Pyronia tithonus britanniae	15								
Sycamore (tree)	Acer pseudoplatanus	occ								
Trooper's Hill										

Common Name	Scientific Name	Abund.	٩	Δ	Ē	တ္က	ţo	Ē	SO	Ö
		P P P	UKAP	SWAP	Avon	Bnes	Bristol	NSom	SGlos	socc
Yarrow	Achillea millefolium	occ		U)	4				U)	U)
Velvet Bent	Agrostis canina	fre								
Common Bent	Agrostis capillaris	fre								
Creeping Bent	Agrostis stolonifera	осс								
Brown Bent	Agrostis vinealis	осс								
Early Hair-grass	Aira praecox	fre								
Barren Brome	Anisantha sterilis	rar								
False Oat-grass	Arrhenatherum elatius	fre								
Mugwort	Artemisia vulgaris	осс								
Silver Birch	Betula pendula	rar								
Downy Birch	Betula pubescens	ОСС								
a soft-brome	Bromus hordeaceus ssp.	rar								
	hordeaceus									
Butterfly-bush	Buddleja davidii	rar								
Heather	Calluna vulgaris	fre				$\checkmark$				
Hedge Bindweed	Calystegia sepium	rar								
Common Knapweed	Centaurea nigra	occ								
Common Centaury	Centaurium erythraea	occ								
Common Mouse-ear	Cerastium fontanum	occ								
Rosebay Willowherb	Chamerion angustifolium	occ								
Creeping Thistle	Cirsium arvense	occ								
Spear Thistle	Cirsium vulgare	rar								
Traveller's Joy	Clematis vitalba	rar								
a cotoneaster	Cotoneaster sp.	rar								
Hawthorn	Crataegus monogyna	occ								
Smooth Hawk's-beard	Crepis capillaris	occ								
Beaked Hawk's-beard	Crepis vesicaria	rar								
Crested Dog's-tail	Cynosurus cristatus	occ								
Broom	Cytisus scoparius	occ								
Cock's-foot	Dactylis glomerata	occ								
Heath-grass	Danthonia decumbens	fre								
Wild Carrot	Daucus carota	occ								
Wavy Hair-grass	Deschampsia flexuosa	abu								
Broad Buckler-fern	Dryopteris dilatata	rar								
Common Male Fern	Dryopteris filix-mas	rar								
Common Couch	Elytrigia repens	occ								
Bell Heather	Erica cinerea	fre								
Hemp-agrimony	Eupatorium cannabinum	rar								
Japanese Knotweed	Fallopia japonica	occ								
Sheep's Fescue [agg.]	Festuca ovina agg.	abu								
Meadow Fescue	Festuca pratensis	rar								
Red Fescue	Festuca rubra sens.str.	occ								
Ash	Fraxinus excelsior	rar								
Heath Bedstraw	Galium saxatile	осс								
Cut-leaved Crane's-bill	Geranium dissectum	rar								
Dove's-foot Crane's-bill	Geranium molle	rar								

**Common Name Scientific Name** SGlos UKAP SWAP 3nes Bristol NSom Herb-robert Geranium robertianum rar Hedera helix Ιvv occ Hogweed Heracleum sphondylium occ a hawkweed Hieracium sp. rar Yorkshire-fog Holcus lanatus fre Wall Barley Hordeum murinum occ Perforate St. John's-Hypericum perforatum rar wort Cat's-ear Hypochaeris radicata occ **Greater Lettuce** Lactuca virosa rar White Dead-nettle Lamium album occ Autumnal Hawkbit Leontodon autumnalis rar Oxeye Daisy Leucanthemum vulgare rar Perennial Rye-grass Lolium perenne OCC Common Bird's-foot-Lotus corniculatus occ trefoil **Black Medick** Medicago lupulina occ Ribbed Melilot Melilotus officinalis rar Timothy Phleum pratense OCC sens.str. Mouse-ear-hawkweed Pilosella officinarum abu **Buck's-horn Plantain** Plantago coronopus rar Ribwort Plantain Plantago lanceolata fre **Greater Plantain** Plantago major occ Knotgrass [agg.] (plant) Polygonum aviculare rar Creeping Cinquefoil Potentilla reptans rar Wild Cherry Prunus avium rar Blackthorn Prunus spinosa rar Bracken Pteridium aquilinum fre Evergreen Oak Quercus ilex occ Pedunculate Oak Quercus robur occ Creeping Buttercup Ranunculus repens OCC Bramble Rubus fruticosus agg. fre Sheep's Sorrel [agg.] Rumex acetosella fre **Curled Dock** Rumex crispus rar **Goat Willow** Salix caprea OCC Elder Sambucus nigra rar **Rock Stonecrop** Sedum forsterianum OCC Senecio erucifolius **Hoary Ragwort** rar Common Ragwort Senecio jacobaea rar Groundsel Senecio vulgaris rar Goldenrod Solidago virgaurea fre Prickly Sow-thistle Sonchus asper rar Smooth Sow-thistle Sonchus oleraceus rar Tansy Tanacetum vulgare occ

Common Name	Scientific Name	Abund.	UKAP	SWAP	Avon	Bnes	Bristol	NSom	SGlos	socc
Dandelion	Taraxacum officinale agg.	occ			·					
Wood Sage	Teucrium scorodonia	occ								
Lesser Trefoil	Trifolium dubium	rar								
Red Clover	Trifolium pratense	occ								
White Clover	Trifolium repens	occ								
<b>Knotted Clover</b>	Trifolium striatum	rar								
Gorse	Ulex europaeus	occ								
Common Nettle	Urtica dioica	occ								
Common Field- speedwell	Veronica persica	rar								
Bush Vetch	Vicia sepium	rar								
Rat's-tail Fescue	Vulpia myuros	occ								
Juniper Haircap	Polytrichum juniperinum	fre								
Bristly Haircap	Polytrichum piliferum	fre								

### 6.2 Records not entered onto the BRERC species database

## 7 FILES HELD AT BRERC FOR THIS AREA

ST67-0-034-008 2005)	This report (Bristol SNCI Favourable Condition Assessment, August
ST67-0-034-000	Troopers Hill

Bristol City Council SNCI Audit – Favourable Conservation Status Assessment Methodology

## Maps

Attached are maps showing **Fig 1** Site Location, **Figure 2** Habitats **and Fig 3** Notable and Invasive Species.