West Penwith Habitat Surveys: Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31(part) – 2022)

First published July 2022 Natural England Research Report NERR120



www.gov.uk/natural-england

Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31 (part) – 2022)



Published July 2022

This report is published by Natural England under the Open Government Licence -OGLv3.0 for public sector information. You are encouraged to use, and reuse, information subject to certain conditions. For details of the licence visit Copyright. Natural England photographs are only available for non-commercial purposes. If any other information such as maps or data cannot be used commercially this will be made clear within the report.

ISBN: 978-1-78354-996-2

© Natural England 2022

Project details

This report should be cited as: BEARD, M.G. 2022. Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31 (part) – 2022). Natural England. NERR120

Natural England Project manager

Mark Beard

Author

Mark Beard

Keywords

Penwith, SSSI, survey,

Further information

This report can be downloaded from the Natural England Access to Evidence Catalogue: http://publications.naturalengland.org.uk/ . For information on Natural England publications contact the Natural England Enquiry Service on 0300 060 3900 or e-mail enquiries@naturalengland.org.uk.

Contents Project details

Project details
Natural England Project manager3
Author3
Keywords3
Further information3
1 General Information5
1.1 Location5
1.2 Summary description5
1.3 Access
1.4 Tenure5
1.5 Survey methodology6
2 Biological description6
2.1 Habitats6
2.1.1 Mosaic: U4b (Festuca ovina-Agrostis capillaris-Galium saxatile grassland, Holcus lanatus-Trifolium repens sub-community) / Ulex gallii scrub
2.1.2 Mosaic: H4 Ulex gallii – Agrostis curtisii heath / W25 Pteridium aquilinum - Rubus fruticosus underscrub6
2.2 Species
3 Condition Assessments
Table 1 Summary of habitats and vegetation communities8
4 References
Appendices10
Species lists for H4, U4b and other vegetation communities10
Map 1 Watch Croft, Trevean, White Downs and Bosullow Common (part) 2022 survey area12
Map 2 Watch Croft, Trevean, White Downs and Bosullow Common (part) 2022 NVC13
Map 3 Watch Croft, Trevean, White Downs and Bosullow Common (part) 2022 priority habitats14

Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31 (part) – 2022)

Vegetation survey:	Mark Beard &
	Alex Gilroy
Report compiled by:	Mark Beard
Date surveyed:	07/04/2022

1 General Information

1.1 Location

Site name/ No.	Watch Croft, Trevean, White Downs and Bosullow Common (part) / Site 31 (part)
County	Cornwall
Parish	Madron / Morvah
Central OS Grid Ref	SW 4226 3512 / SW 4228 3536
Natural England Area Team	Devon, Cornwall & Isles of Scilly
National Character Area	West Penwith (No. 156)

1.2 Summary description

Area	2.17 ha
Altitude	200 - 225m A.O.D.
Aspect	moderate slope, south-easterly
Drainage	Predominantly dry

Survey area 31 Watch Croft, Trevean, White Downs and Bosullow Common was originally surveyed in 2012 and 2014 by Cornwall Environmental Consultants and Hewins Ecology respectively (commissioned by Natural England). Those surveys (combined) covered an extent of some 148.59 ha but omitted two smaller but contiguous areas at Higher Bosullow and White Downs at the southern end of survey area 31, forming part of the same management/ecological unit. These smaller areas were surveyed in 2022 and are the subject of this report.

1.3 Access

Access to Higher Bosullow is possible via a public right of way along a track to the south, but then crossing private land past the abandoned buildings at Coronation Farm. Access to White Downs is possible via a public right of way from SW 4282 3538.

1.4 Tenure

Both parcels of land subject to survey are privately owned and survey was carried out with the permission of the landowner or using legal powers of entry.

1.5 Survey methodology

The site was surveyed by a 'walk-over' survey during which observations of the habitats present were made. For each distinct stand of vegetation observed a species list was compiled with an associated estimate of frequency based upon the DAFOR-scale and the most likely vegetation community type of the National Vegetation Classification (NVC) (Rodwell, et. al., Volume 1, 1991, Volume 2, 1991, Volume 3, 1992) was assigned. This community assignment was implied, based upon a working knowledge of the NVC by the surveyors, and is not based upon an analysis of quadrat data. As such the full NVC methodology has not been applied. Nevertheless, the experience of the surveyors in the field is considered sufficient for the implied NVC communities to be reliable for the purposes of this survey.

2 **Biological description**

2.1 Habitats

The survey site supports mosaics of lowland heathland, lowland dry acid grassland and scrub/under-scrub habitats. Each habitat is discussed in turn below.

2.1.1 Mosaic: U4b (Festuca ovina-Agrostis capillaris-Galium saxatile grassland, Holcus lanatus-Trifolium repens sub-community) / Ulex gallii scrub

Land at Higher Bosullow was occupied by a mosaic of acid grassland and *Ulex gallii* scrub. The ratio was visually estimated in the field at around 40% acid grassland: 60% *Ulex gallii*. Acid grassland was characterised by *Agrostis capillaris, Anthoxanthum oderatum* and *Holcus lanatus* with occasional *Potentilla erectca*. The presence of such species as *H. lanatus*, *Cerastium fontanum* and *Trifolium repens* all suggest a strong affinity to U4b acid grassland. The field parcel had some signs of recent cattle grazing, though no indication of supplementary feeding having recently taken place. Some surface exposed granite was observed suggesting thin soils. The presence of abundant *U. gallii* might suggest some affinitity with a heathland community (e.g. H4 *Ulex gallii – Agrostis curtisii* heath, H8 *Calluna vulgaris – Ulex gallii* heath), but the lack of other indicative dwarf-shrubs such as *Calluna vulgaris* or *Erica cinerea* make such associations tenuous and instead this element of the vegetation is treated as a scrub community not represented in the published NVC. It is possible it may have developed from H4 or H8 heathland vegetation.

2.1.2 Mosaic: H4 Ulex gallii – Agrostis curtisii heath / W25 Pteridium aquilinum -Rubus fruticosus underscrub

A narrow strip of land at Higher Bosullow was occupied by a mosaic of heathland vegetation and bracken-dominated underscrub. The heathland was characterised by *Ulex gallii, Erica cinerea, Calluna vulgaris, Agrostis curtisii* and *Molinia caerulea* and showed a strong affinity to H4 *Ulex gallii – Agrostis curtisii* heath. The under-scrub was characterised by *Pteridium aquilinum* and *Rubus fruticosus* and showed a strong affinity to W25 *Pteridium aquilinum -Rubus fruticosus* underscrub. The ratio was visually estimated in the field at around 60% H4 heath: 40% W25 underscrub. No sub-communities were assigned. This strip of land was bordered on all sides by low Cornish hedges. There was no evidence of recent grazing or other management at the time of the survey. An informal footpath was observed running through the centre of the strip (access to Watch Croft).



Plate 1 – mosaic of *Ulex gallii* scrub and U4b acid grassland at Higher Bosullow (note abandoned buildings at Coronation Farm adjacent)



Plate 2 – mosaic of W25 underscrub (foreground) and H4 heath (middle-ground) at White Downs (looking north toward Watch Croft); note low Cornish hedges on either side

2.2 Species

No rare, scarce or threatened species were noted during the survey.

3 Condition Assessments

Due to the small size of habitat present and that the survey areas form art of a larger extent of semi-natural habitat previously surveyed, no condition assessment were deemed necessary.

Table 1 Summary	/ of habitats and v	venetation	communities
	/ 01 11/0/11/01/03 01/01 0	eyelalion	COMMUNICES

Site 31 (part) – Watch Croft, Trevean, White Downs and Bosullow Common (part) (2022)				
Habitat	NVC communities	Area (ha)	Priority Habitat area (ha)	CA category
Acid grassland / scrub mosaic	U4b / <i>U. gallii</i> scrub	1.69	0.67	n/a
Heathland / underscrub mosaic	H4 / W24	0.48	0.29	n/a
Condition assessment reporting categories: Favourable (F), Unfavourable Recovering (UFR), Unfavourable No Change (UFNC), Unfavourable Declining (UFD)				

4 References

Groome, G. (2014) West Penwith Habitat Surveys: Watch Croft, Trevean, White Downs and Bosullow Common (part) (survey area 31 – 2014). Hewins Ecology.

Rodwell J.S. (ed). (1991) British Plant Communities Volume 1. Woodlands and Scrub. Cambridge University Press, Cambridge.

Rodwell J.S. (ed). (1991) British Plant Communities Volume 2. Mires and heaths. Cambridge University Press, Cambridge.

Rodwell J.S. (ed). (1992) British Plant Communities Volume 3. Grasslands. Cambridge University Press, Cambridge.

Sproull, J. (2012) West Penwith Habitat Surveys: Watch Croft (survey area 31 – 2012). Cornwall Environmental Consultants.

Appendices

Species lists for H4, U4b and other vegetation communities

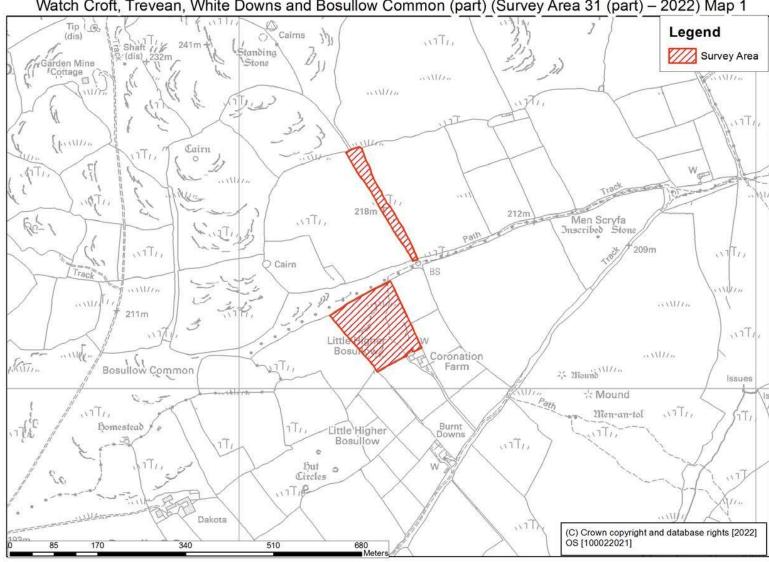
DAFOR ratings:

- D = dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare L = Locally (frequent, abundant, dominant)
- E = Edge (i.e. a species recorded from the margins of the mapped habitat/community)

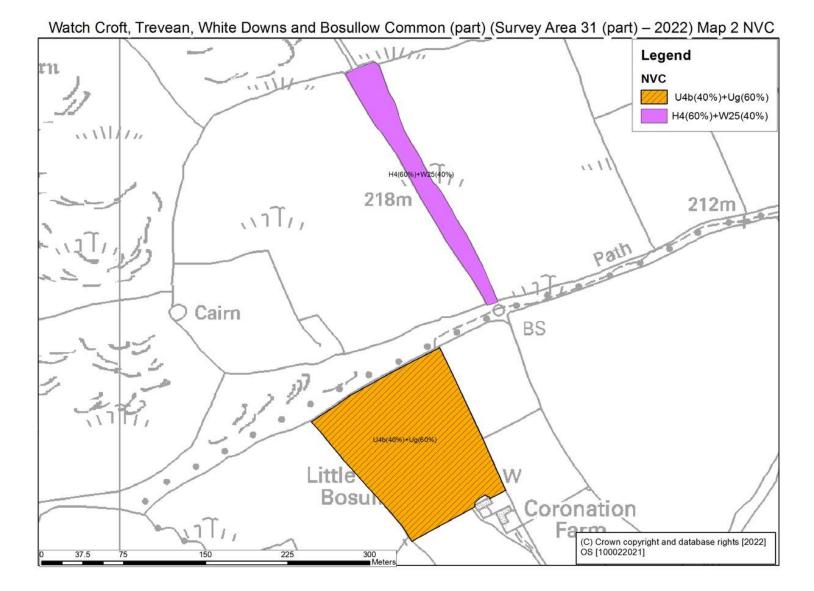
		Community / sub-community		
Scientific name	Common name	H4	U4b / Ulex gallii scrub mosaic	W25
Agrostis capillaris	common bent	0	A	
Agrostis curtisii	bristle bent	F		
Anthoxanthum oderatum	sweet vernal-grass	F	F	
Calluna vulgaris	heather	F		
Carex binervis	green-ribbed sedge	0	F	
Cerastium fontanum	common mouse-ear		0	
Conopodium majus	pignut	0		
Digitalis purpurea	foxglove	R	0	
Erica cinerea	bell heather	F		
Festuca rubra	red fescue		O/F	
Hedera helix	ivy			LF
Holcus lanatus	Yorkshire-fog		A	F
Hyacinthoides non-scripta	bluebell	0		
Hypochaeris radicata	common cat's-ear		F	
Juncus effusus	soft rush		0	
Lotus corniculatus	common bird's-foot- trefoil		0	
Luzula campestre	field woodrush		0	
Molinia caerulea	purple moor-grass	A	F	
Plantago lanceolata	ribwort plantain		F	
Potentilla erectca	tormentil	F	0	
Pseudoscleropodium purum	neat feather-moss	0	F	

Pteridium aquilinum	bracken			A
Ranunculus repens	creeping buttercup		F	
Rubus fruticosus agg.	bramble		A	A
Rumex acetosa	common sorrel		F	
Rumex acetosella	sheep's sorrel		F	
Teucrium scorodonia	wood sage	0		
Trifolium repens	white clover		F	
Ulex gallii	western gorse	A	А	
Vaccinium myrtillus	bilberry	ER		

Map 1 Watch Croft, Trevean, White Downs and Bosullow Common (part) 2022 survey area

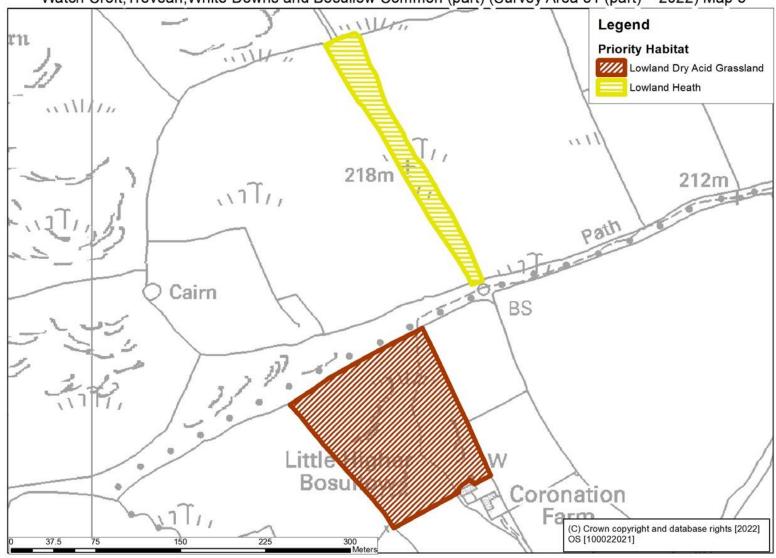


Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31 (part) - 2022) Map 1



Map 2 Watch Croft, Trevean, White Downs and Bosullow Common (part) 2022 NVC





Watch Croft, Trevean, White Downs and Bosullow Common (part) (Survey Area 31 (part) - 2022) Map 3

Natural England is here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

Natural England publications are available as accessible pdfs from www.gov.uk/natural-england.

Should an alternative format of this publication be required, please contact our enquiries line for more information: 0300 060 3900 or email enquiries@naturalengland.org.uk.

ISBN 978-1-78354-996-2

Catalogue code: NERR120

This publication is published by Natural England under the Open Government Licence v3.0 for public sector information. You are encouraged to use, and reuse, information subject to certain conditions. For details of the licence visit www.nationalarchives.gov.uk/doc/opengo vernment-licence/version/3.

Please note: Natural England photographs are only available for noncommercial purposes. For information regarding the use of maps or data visit <u>www.gov.uk/how-to-access-</u> <u>naturalenglands-maps-and-data</u>.

© Natural England 2022

