West Penwith Habitat Surveys: Trink Hill (part) (survey area 55 (part) – 2021)

First published July 2022 Natural England Research Report NERR119



Natural England Research Report NERR119

West Penwith Habitat Surveys: Trink Hill (part) (survey area 55 (part) – 2021)

Mark Beard



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: 978-1-78354-995-5

© Natural England 2022

Project details

This report should be cited as: BEARD, M.G. 2022. West Penwith Habitat Surveys: Trink Hill (part) (survey area 55 (part) – 2021). Natural England. NERR119

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	3
Natural England Project manager	3
Author	3
Keywords	3
Further information	3
1 General Information	5
1.1 Location	5
1.2 Summary description	5
1.3 Access	5
1.4 Tenure	5
1.5 Survey methodology	5
2 Biological description	6
2.1 Habitats	6
2.1.1 Semi-improved grassland, MG10a Holcus lanatus-Juncus effusus sub-community	
2.1.2 scrub & underscrub vegetation	7
2.1.3 ruderal vegetation	7
2.2 Species	7
3 Condition Assessments	7
Table 1 Summary of habitats and vegetation communities	7
4 References	8
Appendices	9
Species lists for H4 and Molinia-Pteridium (Mol-Pta) vegetation communiti	es9
Map 1 Trink Hill (east) survey site	11
Map 2 Trink Hill (east) NVC	12

Trink Hill (part) (Survey Area 55 (part) – 2021)

Vegetation survey:	Mark Beard &
	Alex Gilroy
Report compiled by:	Mark Beard
Date surveyed:	08/09/2021

1 General Information

1.1 Location

Site name/ No.	Trink Hill (part) / Site 55 (part)
County	Cornwall
Parish	Ludgvan
Central OS Grid Ref	SW 5064 3758
Natural England Area Team	Devon, Cornwall & Isles of Scilly
National Character Area	West Penwith (No. 156)

1.2 Summary description

Area	1.04 ha
Altitude	140m A.O.D.
Aspect	flat (at base of slope)
Drainage	Predominantly dry (seasonally wet)

Survey area 55 Trink Hill was originally surveyed in 2013 by Hewins Ecology (commissioned by Natural England). That survey covered an extent of some 45.77 ha but omitted a small but contiguous area at the eastern side of Trink Hill, forming part of the same management unit. This smaller area was surveyed in 2021 and is the subject of this report.

1.3 Access

Access is possible via a track from the south accessed via Trink Farm. The land is mapped as Open Country for public access, with public rights of way crossing it.

1.4 Tenure

The survey site is privately owned and survey was carried out with the permission of the landowner.

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 3, 1992, Volume 5, 2000) 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 semi-improved mesotrophic grassland, scrub, bramble patches and ruderal habitats. Each habitat is discussed in turn below. None of these habitats are considered Priority Habitats.

2.1.1 Semi-improved grassland, MG10a Holcus lanatus-Juncus effusus rush-pasture, typical sub-community

The majority of the area was occupied by a stand of semi-improved grassland, characterised by *Agrostis stolonifera* and *Holcus lanatus*. The sward was uneven with some bare ground and many annuals suggesting poaching from livestock; a drinking trough was present within the grassland stand and it is immediately adjacent to a livestock supplementary feeding station understood to be used in the winter months. *Persicaria hydropiper* was also locally frequent, evidence of winter wet conditions. This suggests affinities to MG10a *Holcus lanatus-Juncus effusus* rush-pasture, typical sub-community. It is atypical of the published NVC for this sub-community type as rushes *Juncus* spp. were no more than occasional along with the presence of several annuals/biennials at relatively high abundance (e.g. *Anagallis arvensis, Coronopus didymus, Persicara hydropiper* and *Polygonum aviculare*). This may be due to grazing/trampling by cattle if they congregate here for winter supplementary feeding. The presence of *Cynosurus cristatus* and *Lolium perenne* suggest some possible affinity with MG6 *Lolium perenne - Cynosurus cristatus* grassland though as they are no more than occasional to locally frequent the affinity to MG10 is considered stronger.



Plate 1 – mesotrophic grassland; note locally abundant water-pepper *Persicaria hydropiper* in the foreground with bramble patches beyond

2.1.2 scrub & underscrub vegetation

One small stand of scrub was present characterised by *Salix cinerea*. This was observed to be species-poor and no species list was made. Whilst it could be assigned to W1 *Salix cinerea-Galium palustre* woodland, the lack of a developed ground-flora made for a poor match and it was considered more appropriate to assign to no NVC community, consistent with other surveys elsewhere in Penwith Moors where this type of poorly developed willow scrub has been encountered.

Two distinct patches of bramble were present. These were observed to be species-poor and whilst no species list was made they are assigned to W24 *Rubus fruticosus* agg. - *Holcus lanatus* underscrub; no sub-community is assigned.

2.1.3 ruderal vegetation

A strip of ruderal vegetation was present, characterised by *Urtica dioicia* and *Rubus fruticosus*. *Persicaria hydropiper* was also present along with a tall brassica which could not be identified in the field as it was largely desiccated due to the season (probably *Brassica nigra*, though could possibly be *B. rapa*, *B. napus* or *Sisymbrium officinale*). This stand of vegetation was difficult to assign to an NVC community with certainty, though it demonstrates some affinity with OV24b *Urtica dioicia-Galium aparine*, *Arrhenatherum elatius-Rubus fruticosus* agg. sub-community. It is atypical of the published NVC for this (sub)community type as *Galium aparine*, *Arrhenatherum elatius* and *Heracleum sphondylium* were absent whereas *Persicaria hydropiper* was frequent. This may reflect a tendency for this location to be wet in winter and also the likely influence of the adjacent livestock supplementary feeding station in terms of regular disturbance.

2.2 Species

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

3 Condition Assessments

As no priority habitats were observed, no condition assessment was necessary.

Table 1 Summary of habitats and vegetation communities

Site 55 (part) – Trink Habitat	Hill (part) (2021) NVC communities	Area (ha)	Priority Habitat area (ha)	CA category
Semi-improved grassland	MG10a	0.866	n/a	n/a
Underscrub	W24	0.033	n/a	n/a
Salix scrub	n/a	0.026	n/a	n/a
Ruderal	OV24b	0.070	n/a	n/a

Condition assessment reporting categories:

Favourable (F), Unfavourable Recovering (UFR), Unfavourable No Change (UFNC), Unfavourable Declining (UFD)

4 References

Pilkington, S. (2013) West Penwith Habitat Surveys: Trink Hill (survey area 55 – 2013). Hewins Ecology.

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

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

Rodwell J.S. (ed). (2000) British Plant Communities Volume 5. Maritime communities and vegetation of open habitats. Cambridge University Press, Cambridge.

Appendices

Species lists for H4 and Molinia-Pteridium (Mol-Pta) vegetation communities

DAFOR ratings:

D = dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare L = Locally (frequent, abundant, dominant)

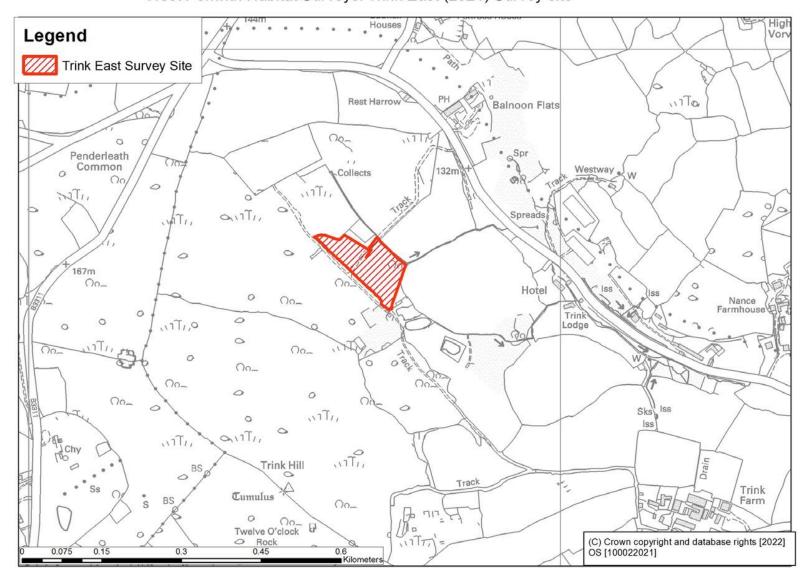
E = Edge (i.e. a species recorded from the margins of the mapped habitat/community)

Scientific name		Community / sub-community			
	Common name	MG10a	W24	Salix scrub	OV24b
Agrostis stolonifera	creeping bent	А			
Anagallis arvensis	scarlet pimpernel	LF			
Cerastium fontanum	common mouse-ear	0			
Cirsium arvense	creeping thistle	LF			
Cirsium vulgare	spear thistle	LF			
Coronopus didymus	lesser swinecress	LF			
Cynosurus cristatus	crested dog's-tail	0			
Holcus lanatus	Yorkshire-fog	А			
Juncus effusus	soft rush	0			
Lolium perenne	perennial rye-grass	0			
Lotus pedunculatus	greater bird's-foottrefoil	0			
Persicaria hydropiper	water-pepper	LA			F
Plantago lanceolata	ribwort plantain	0			
Plantago major	broad-leaved plantain	0			
Poa annua	annual meadow-grass	LF			
Polygonum aviculare	knotgrass	LF			
Potentilla reptans	creeping cinquefoil	0			
Ranunculus repens	creeping buttercup	0			
Rubus fruticosus agg.	bramble	LF	D		Α
Rumex acetosa	common sorrel	0			
Rumex crispus	curled dock	R			
Rumex obtusifolius	broad-leaved dock	0			

Salix cinerea	grey willow		D	
Sonchus asper	prickly sow-thistle	R		
Stellaria media	common chickweed	0		
Trifolium repens	white clover	0		
Urtica dioica	stinging nettle			А
Veronica serpyllifolia	thyme-leaved speedwell	R	_	_

Map 1 Trink Hill (east) survey site

West Penwith Habitat Surveys: Trink East (2021) Survey site



Map 2 Trink Hill (east) NVC

West Penwith Habitat Surveys: Trink East (2021) NVC



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 978-1-78354-995-5

Catalogue code: NERR119

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/opengovernment-licence/version/3.

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

© Natural England 2022

