


The Mole, Barry Botanical and Habitat Survey, Memo Letter V1.0 Job No. T7164	
Contact: Nick Card ABP DevCo 25 Bedford Street London WC2E 9ES.	Temple Group LTD Trent Park, 1-2 The Mews, Eastern Ave, Lichfield, WS13 6RN.
Client: ABP DevCo	Dr Kirsten L Hunter BSc (Hons)
16/06/2022	Reviewed by: Wendy McFarlane MA MSc MCIEEM

## Introduction

Temple was commissioned by ABP DevCo in May 2022 to carry out a botanical and habitat survey of land known as The Mole, Barry Docks (henceforth referred to as ‘the Site’). This was in order to update a previous habitat survey undertaken by Temple (The Ecology Consultancy, 2021) outside the optimal season for key plant species (January 2020) such as locally notable and protected plants including rough marsh-mallow *Malva setigera* and perennial centaury *Centaureum scilloides* which were previously identified in the local records centre data search.

The Site measures approximately 3.3ha in size, located on a narrow promontory of land within Barry Docks, South Wales and centred on Ordnance Survey National Grid reference ST 1140 6738. The Site is not subject to any statutory or non-statutory nature conservation designations. The closest statutory designated site is Barry Island Site of Special Scientific Interest (SSSI) which lies 718m to the south-west. The closest non-statutory site for wildlife is the Gladstone Road Pond Site of Importance of Nature Conservation (SINC) which lies 1km to the north-west.

## Methodology

A botanical and habitat survey of the Site was carried out on the 10<sup>th</sup> June 2022 in good, dry weather by Dr Kirsten Hunter. The survey covered all areas within the red line boundary as provided by the client (as shown in Appendix 1). The habitat surveys were carried out following the Phase 1 Habitat Survey Guidelines, concentrating on the potential presence of protected and locally notable Schedule 8 plants. These included rough marsh-mallow and perennial centaury. Rough marsh-mallow is listed as a Species of Principle Importance (SPI) and as Locally Important in the South East Wales Biodiversity Records Centre (SEWBReC) area. Perennial centaury is listed as an SPI, is listed in the UK Red Data Book based on IUCN guidelines, a Local Biodiversity Action Plan (LBAP) Species and is listed in the Vascular Plant Red Data List for Wales. The desk study recorded the closest instance of rough marsh-mallow was approximately 750m east of the Site (The Ecology Consultancy, 2020). There are historic records of perennial centaury on the Site.

The surveyor compiled a full comprehensive list of all botanical species present on site outlining any protected or notable plants. Where identified, the locations of these plants would be accurately recorded using GPS co-ordinates. A map of the survey area is included in Appendix 1, with a full species list included in Appendix 2.

## Results

The habitat on Site comprises tussocky semi-improved grassland throughout with scattered scrub particularly around the edges of the Site, on embanked/made ground and within the western portion of the Site as identified by the previous survey (The Ecology Consultancy, 2020). However, a greater species diversity was found than previously recorded, most likely due to the previous survey being undertaken at a sub-optimal time of the year and some natural plant succession into less diverse areas over the two years since the previous survey. Protected and notable plants, namely rough marsh-mallow and perennial centaury were not identified during the survey.

The results of the updated habitat survey were as follows and presented in Appendix 1:

### ***Wildflower-rich semi-improved neutral grassland***

The section of grassland previously recorded as amenity grassland (TN1) on the eastern portion of the boat yard, was upgraded to semi-improved grassland due to species diversity per square metre. Species recorded in abundance which justify this change in classification included frequently occurring marker species such as ribwort plantain *Plantago lanceolata*, occasionally occurring yarrow *Achillea*

*millefolium*, black medick *Medicago lupulina*, lesser trefoil *Trifolium dubium* and red clover *Trifolium pratense* and rarely occurring meadow buttercup *Ranunculus acris*.

Other notably wildflower-rich instances occurred at TN2 including abundant ox-eye daisy *Leucanthemum vulgare* and crown vetch *Securigera varia*, frequently occurring valerian *Valeriana officinalis*, flax *Linum usitatissimum*, and kidney vetch *Anthyllis vulneraria*, and occasionally occurring *Tanacetum vulgare*, wild carrot *Daucus carota subsp. carota* and pyramidal orchid *Anacamptis pyramidalis*. At TN3, three bee orchids *Ophrys apifera* were recorded.

### **Scattered and continuous scrub**

Previously recorded scrub areas were more extensive than previously recorded likely due to natural encroachment. This included dominant brambles *Rubus fruticosus agg.* and growth of hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* at TN4.

### **Recommendations**

In addition to the recommendations set out by the PEA (The Temple Consultancy, 2021) regarding protected and priority species, the additional measures are advised:

The Site has a high plant species diversity therefore it is recommended the Site is managed to promote and increase species diversity through management processes for wildflower meadows, particularly with regards to increasing bee orchid numbers. This can be accomplished through a September cut. Cuttings should be allowed to dry and so that wildflower seeds can naturally spread, then removed so as not to smother new growth. Re-seeding with further wildflower species would not be necessary.

## Legislation

### Plants and Fungi

All wild plants are protected under the Wildlife and Countryside Act 1981 (as amended). This makes it an offence for an 'unauthorised' person to intentionally uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them. Certain rare species of plant and fungi are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 13. This prohibits any person:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species; and
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof.

In addition to the legislation outlined above several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017 (as amended). These are species of European importance. Regulation 45 makes it an offence to:

- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species; and
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

### Injurious Weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' such as spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, and common ragwort *Senecio jacobaea* onto agricultural land, particularly grazing areas or land which is used to produce conserved forage. It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice<sup>1</sup> as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines on how to prevent the spread of this species but is not legally binding.

### *How is the legislation pertaining to protected plants liable to affect development works?*

A mitigation licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect species of plant listed under The Conservation of Habitats

---

<sup>1</sup> Defra (2004) Code of Practice on How to Prevent the Spread of Ragwort:  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69264/pb9840-cop-ragwort.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69264/pb9840-cop-ragwort.pdf)

and Species Regulations 2017 (as amended). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

## References

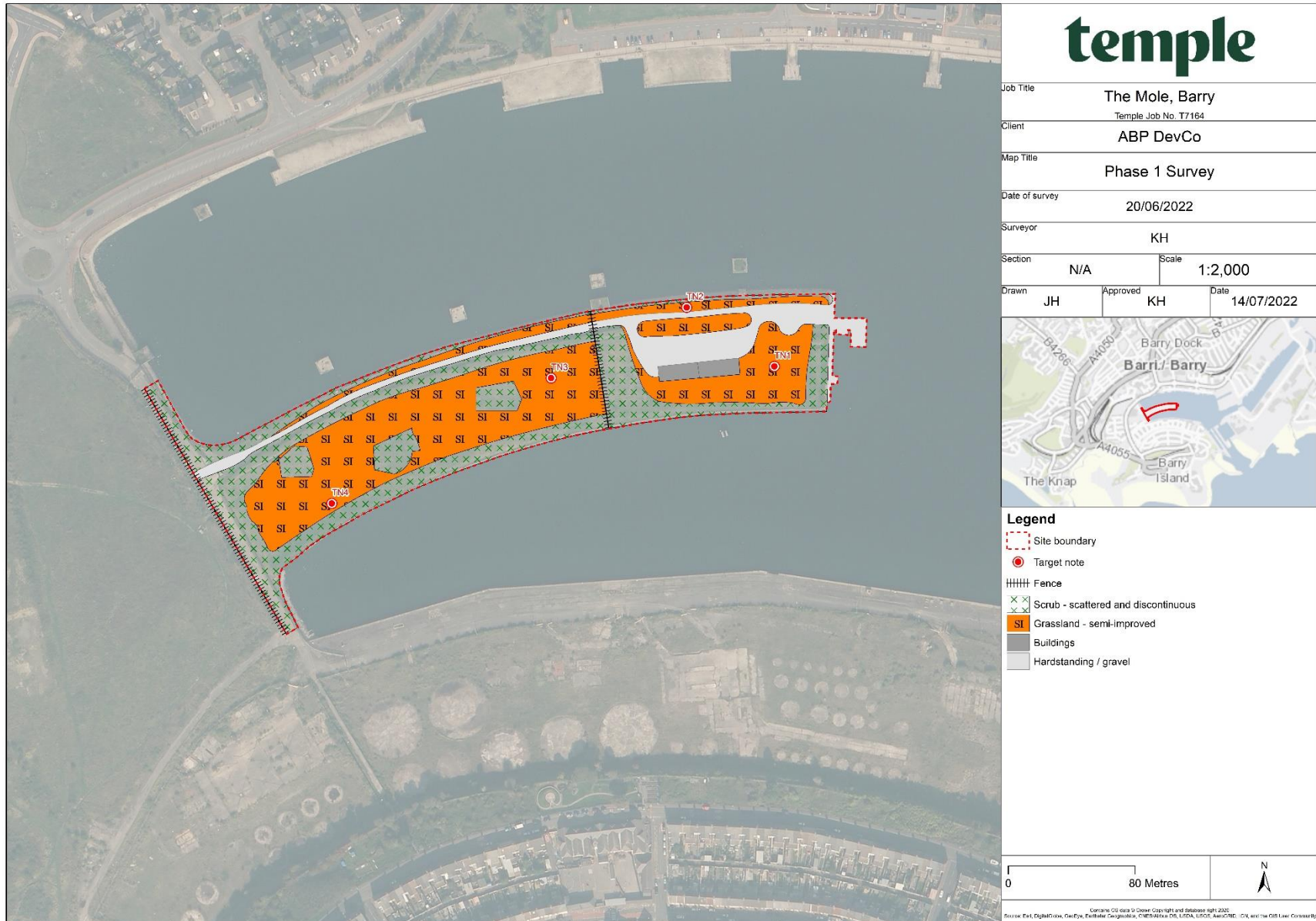
JNCC - Joint Nature Conservation Committee. (2010). Handbook for Phase 1 habitat survey - A technique for Environmental Audit. JNCC, Peterborough. [On-line]. Available from <http://www.jncc.gov.uk/page-2468> [Accessed: 05/06/2022].

Newton, J., Nicholson, B., Saunders, R., Willets, R. and Venables, R. (2011) Working with wildlife: guidance for the construction industry (2nd Ed.). CIRIA, London.

The Ecology Consultancy (2020). The Mole and The Quay, Barry: Preliminary Ecological Appraisal. Report for ABPmr.

Stace, C.A. (2019). New Flora of the British Isles (4th Ed.). Cambridge University Press, Cambridge.

## Appendix 1: Habitat Survey



## Appendix 2: Species list for whole Site

Scientific nomenclature and common names for vascular plants follow Stace (2019). Abundance was estimated using the DAFOR scale and additional notes taken as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally, c = clumped, e = edge only, g = garden origin, p = planted, y = young, s = seedling or sucker, t = tree, h = hedgerow, w = water

Scientific Name	Common Name	DAFOR	DOMIN	Qualifier
<i>Achillea millefolium</i>	Yarrow	O	3	
<i>Allium roseum</i>	Rosy garlic	R	1	c
<i>Anacamptis pyramidalis</i>	Pyramidal orchid	O	4	
<i>Anthyllis vulneraria</i>	Kidney vetch	F	6	e
<i>Arctium lappa</i>	Greater burdock	R	2	c
<i>Arrhenatherum elatius</i>	False oat-grass	A	8	
<i>Artemisia vulgaris</i>	Mugwort	R	2	c, e
<i>Bellis perennis</i>	Daisy	O	3	
<i>Bromus hordeaceus</i> <i>subsp. hordeaceus</i>	Common soft-brome	F	5	
<i>Buddleja davidii</i>	Butterfly-bush	F	5	
<i>Carex flacca</i>	Glaucous sedge	R	2	
<i>Carex muricata</i>	Prickly sedge	R	2	
<i>Cerastium fontanum</i>	Common mouse-ear	O	3	
<i>Cirsium arvense</i>	Creeping thistle	F	6	
<i>Convolvulus arvensis</i>	Field bindweed	O	3	
<i>Crataegus monogyna</i>	Hawthorn	R	2	t
<i>Cynosurus cristatus</i>	Crested dog's-tail	R	2	
<i>Dactylis glomerata</i>	Cock's-foot	F	5	
<i>Daucus carota subsp.</i> <i>carota</i>	Wild carrot	O	4	



<i>Dipsacus fullonum</i>	Wild teasel	F	6	
<i>Echium vulgare</i>	Viper's-bugloss	LR	1	c, e
<i>Elytrigia repens</i>	Common couch	O	4	
<i>Equisetum arvense</i>	Field horsetail	R	2	
<i>Festuca rubra</i>	Red fescue	F	6	
<i>Foeniculum vulgare</i>	Fennel	LO	3	
<i>Galium aparine</i>	Cleavers	O	3	
<i>Geranium columbinum</i>	Long-stalked crane's-bill	R	2	
<i>Geranium dissectum</i>	Cut-leaved crane's-bill	O	3	
<i>Geranium molle</i>	Dove's-foot crane's-bill	O	3	
<i>Heracleum sphondylium</i>	Hogweed	R	2	
<i>Holcus lanatus</i>	Yorkshire-fog	F	6	
<i>Lathyrus pratensis</i>	Meadow vetchling	O	4	
<i>Leucanthemum vulgare</i>	Oxeye daisy	A	7	
<i>Linum catharticum</i>	Fairy flax	R	1	
<i>Linum usitatissimum</i>	Flax	F	6	
<i>Lolium perenne</i>	Perennial rye-grass	O	4	
<i>Lotus corniculatus</i>	Common bird's-foot-trefoil	O	4	
<i>Medicago lupulina</i>	Black medick	O	4	
<i>Ophrys apifera</i>	Bee orchid	R	2	c
<i>Petasites hybridus</i>	Butterbur	O	3	c
<i>Plantago lanceolata</i>	Ribwort plantain	F	4	
<i>Poa annua</i>	Annual meadow-grass	O	4	
<i>Poa trivialis</i>	Rough meadow-grass	F	5	
<i>Potentilla reptans</i>	Creeping cinquefoil	O	5	
<i>Prunus spinosa</i>	Blackthorn	R	2	c, t
<i>Ranunculus acris</i>	Meadow buttercup	R	2	
<i>Ranunculus repens</i>	Creeping buttercup	F	5	



<i>Reseda alba</i>	White mignonette	R	1	c, e
<i>Rosa canina</i>	Dog-rose	O	3	
<i>Rubus fruticosus agg.</i>	Bramble	O	4	
<i>Rumex crispus</i>	Curled dock	F	6	
<i>Securigera varia</i>	Crown vetch	A	7	e
<i>Sedum acre</i>	Biting stonecrop	R	1	
<i>Senecio jacobaea</i>	Common ragwort	O	4	
<i>Sinapis arvensis</i>	Charlock	A	7	
<i>Sonchus asper</i>	Prickly sow-thistle	O	3	
<i>Symphytum officinale</i>	Common comfrey	LR	1	
<i>Tanacetum vulgare</i>	Tansy	O	3	e
<i>Taraxacum officinale agg.</i>	Dandelion	O	4	
<i>Trifolium dubium</i>	Lesser trefoil	O	3	
<i>Trifolium pratense</i>	Red clover	O	3	
<i>Trifolium repens</i>	White clover	O	3	
<i>Ulex europaeus</i>	Gorse	R	2	
<i>Valeriana officinalis</i>	Common valerian	F	5	e
<i>Vicia cracca</i>	Tufted vetch	O	3	
<i>Vicia sativa subsp. segetalis</i>	Common vetch	R	2	