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**Letter of report: Phase II Vegetation Survey for land at Horndean Road, Emsworth,
Hampshire.**

Ref: WEc_Azure63_2

19th September 2013

Dear Mr White,

Introduction

Wychwood Environmental (WE) was commissioned by Azure Ecology Ltd to undertake a Phase II Vegetation Survey on land associated with a proposed housing development on existing arable land located just off Horndean Road, Emsworth.

A Phase I Survey and desk study was conducted by Paul Whitby in May 2103. During this survey areas of semi-improved grassland were recorded (Figure 1). In addition the requested Hampshire Biological Records dataset showed that there were some plants identified near to the site that are Nationally Scarce or IUCN red list species, including the green-winged orchid (*Orchis morio*), Autumn ladies tresses (*Spiranthes spiralis*), Corn Spurrey (*Spergula arvensis*) and Wild clary (*Salvia verbenaca*).

It was therefore recommended that a NVC survey was undertaken around late June/early July, when most plants are visible to assess the botanical value of the site and establish if any protected plants or plants of conservation concern are present.

Survey Methods

National Vegetation Classification (NVC) survey

A detailed survey of the grassland was undertaken on 27th June 2013 to ascertain the National Vegetation Classification criteria (Rodwell, 1992)¹ to which the existing habitat would conform. The survey technique followed guidelines set out in the National Vegetation Classification Users' handbook (Rodwell, 2006)².

The survey was conducted using 8 plots throughout the specified grassland. The location of plots is shown in Figure 1. The methodology was conducted as follows: 2m x 2m quadrats were used. Within each quadrat species presence and abundance was recorded for each species. Abundance values were recorded using the DOMIN scale as follows: 1: rare, 2:

¹ Rodwell, J.S. 1992. British Plant Communities: Volume 3. Grassland and montane Communities. Cambridge.

² Rodwell, J.S. 2006. National Vegetation Classification Users Handbook. JNCC.

sparse, 3: frequent (but all less than 4%), 4: 4-10%, 5:11-25%, 6: 26-33%, 7: 34-50%, 8:51-75%, 9: 76-90%, 10: 91-100%.

The data were entered into excel spreadsheets (Appendix 1). The appropriate NVC community classifications was then assigned to the grassland surveyed using the computer software MAVIS³ and Volume 3 of British Plant communities (Rodwell,1992). Through MAVIS a Countryside Vegetation System (CVS) has also been assigned.



Figure 1 – Location of Semi –improved grassland (SI) and survey plots (Purple).

Results and recommendations

The British NVC community falls between **OV23** (*Lolium perenne* - *Dactylis glomerata* community) and **MG7** (*Lolium perenne* leys and related grasslands). Photo 1 shows the sward type.

OV23 is an open habitat community characteristic of gateways, tracksides and courtyards. This community occurs widely throughout lowland Britain.

MG7 is a mesotrophic grassland community, which is often resown, chemically fertilized, ploughed or grazed/cut for silage. This community occurs widely throughout lowland Britain.

Running data through MAVIS also presents the assigned Countryside Vegetation System (CVS) classification as **Mixed Eutrophic grassland**.

No nationally Scarce or IUCN red list species were recorded during the survey.

³ Modular Analysis of Vegetation Information System (MAVIS) is a programme for analysing vegetation data using different types of classifications developed for Great Britain. These include the Countryside Vegetation System (CVS) and other measures, such as fertility and competitor scores, as used in Countryside Survey 2000. MAVIS also includes classification programmes for the National Vegetation Classification (NVC).

In summary, the existing grassland is of relatively low conservation value, however, the presence of species such as vetches (*Vicia spp.*) and clovers (*Trifolium spp.*) are highly beneficial for pollinating insects, many of which were observed on the field margins during the survey (Photo 2). It is recommended that the field margins are preserved where possible and appropriately managed in order to retain, and ideally enhance, existing floral diversity in the local area.



Photo 1 – Grassland Sward around arable land at Horndean Road, Emsworth.



Photo 2 – Vetches (*Vicia cracca* and *Lathyrus nissolia*) recorded in sward.

Should you need any further advice on the information provided above please do not hesitate to contact me.

Kind regards,

[Redacted signature]

Rob

Appendix 1 – NVC Survey Plot Data.

Plot Number	Species	Domin Scale
1	<i>Trifolium dubium</i>	5
1	<i>Holcus lanatus</i>	5
1	<i>Vicia tetrasperma</i>	2
1	<i>Salix caprea</i>	4
1	<i>Cirsium arvense</i>	1
1	<i>Vicia sativa</i>	1
1	<i>Lathyrus nissolia</i>	1
1	<i>Senecio jacobaea</i>	2
1	<i>Arrhenatherum elatius</i>	2
1	<i>Festuca rubra</i>	4
1	<i>Hypochaeris radicata</i>	1
1	<i>Dactylis glomerata</i>	2
1	<i>Poa annua</i>	4
1	<i>Pulicaria dysenterica</i>	1
2	<i>Holcus lanatus</i>	6
2	<i>Lactuca virosa</i>	3
2	<i>Bromus hordeaceus</i>	3
2	<i>Salix caprea</i>	2
2	<i>Plantago media</i>	1
2	<i>Poa annua</i>	4
2	<i>Ranunculus repens</i>	3
2	<i>Taraxacum agg</i>	1
2	<i>Lolium perenne</i>	2
2	<i>Trifolium dubium</i>	1
2	<i>Pulicaria dysenterica</i>	1
2	<i>Trifolium repens</i>	2
2	<i>Senecio jacobaea</i>	1
2	<i>Pastinaca sativa</i>	1
	<i>Ranunculus repens</i>	6
		6
	<i>Dactylis glomerata</i>	3
	<i>Trifolium repens</i>	3
3	<i>Trifolium repens</i>	4
3	<i>Elymus repens</i>	3
3	<i>Rhinanthus minor</i>	1
3	<i>Lolium perenne</i>	3
3	<i>Poa annua</i>	2
3	<i>Cirsium arvense</i>	1
3	<i>Geranium dissectum</i>	1
3	<i>Vicia tetrasperma</i>	1
3	<i>Hypochaeris radicata</i>	1
3	<i>Pulicaria dysenterica</i>	2
4	<i>Holcus lanatus</i>	6
4	<i>Salix caprea</i>	5
4	<i>Cirsium arvense</i>	1
4	<i>Pulicaria dysenterica</i>	4

4	<i>Trifolium dubium</i>	3
4	<i>Senecio jacobaea</i>	1
4	<i>Lactuca virosa</i>	1
4	<i>Bromus hordeaceus</i>	2
4	<i>Geranium dissectum</i>	1
4	<i>Ranunculus repens</i>	1
4	<i>Lolium perenne</i>	3
4	<i>Trifolium repens</i>	1
4	<i>Vicia sativa</i>	1
4	<i>Hypochaeris radicata</i>	1
4	<i>Pulicaria dysenterica</i>	1
5	<i>Holcus lanatus</i>	5
5	<i>Vicia tetrasperma</i>	3
5	<i>Festuca ovina</i>	4
5	<i>Elymus repens</i>	4
5	<i>Trifolium dubium</i>	3
5	<i>Geranium dissectum</i>	1
5	<i>Convolvulus arvensis</i>	2
5	<i>Cirsium arvense</i>	3
5	<i>Senecio jacobaea</i>	1
5	<i>Vicia sativa</i>	1
	<i>Brachypodium sylvaticum</i>	
5		2
5	<i>Plantago media</i>	2
5	<i>Ranunculus repens</i>	1
5	<i>Trifolium repens</i>	1
6	<i>Holcus lanatus</i>	5
6	<i>Ranunculus repens</i>	6
6	<i>Vicia cracca</i>	2
6	<i>Lathyrus nissolia</i>	3
6	<i>Vicia tetrasperma</i>	3
6	<i>Trifolium dubium</i>	3
6	<i>Dactylis glomerata</i>	2
6	<i>Lolium perenne</i>	3
6	<i>Bromus hordeaceus</i>	3
6	<i>Poa annua</i>	3
6	<i>Lactuca virosa</i>	1
6	<i>Trifolium repens</i>	3
6	<i>Convolvulus arvensis</i>	1
6	<i>Rumex sp.</i>	1
6	<i>Rubus fruticosus</i>	1
7	<i>Festuca rubra</i>	4
7	<i>Holcus lanatus</i>	4
7	<i>Vicia cracca</i>	5
7	<i>Senecio jacobaea</i>	1
7	<i>Elymus repens</i>	4
7	<i>Trifolium dubium</i>	3
	<i>Hypericum perforatum</i>	
7		1
	<i>Centaurium erythraea</i>	
7		2

7	<i>Hypochaeris radicata</i>	1
7	<i>Bromus hordeaceus</i>	2
7	<i>Equisetum arvense</i>	1
8	<i>Vicia cracca</i>	5
8	<i>Holcus lanatus</i>	5
8	<i>Bromus hordeaceus</i>	3
8	<i>Poa annua</i>	3
8	<i>Cirsium arvense</i>	1
8	<i>Cerastium fontanum</i>	1
8	<i>Equisetum arvense</i>	1
8	<i>Trifolium repens</i>	3
8	<i>Vicia hirsuta</i>	1
8	<i>Trifolium dubium</i>	2
8	<i>Plantago lanceolata</i>	2
8	<i>Vicia sativa</i>	1
8	<i>Pulicaria dysenterica</i>	1
	<i>Arrhenatherum</i>	
8	<i>elatius</i>	1
8	<i>Ranunculus repens</i>	1
8	<i>Taraxacum agg</i>	1
8	<i>Rubus fruticosus</i>	1
	Additonal species recorded outside of plots	
	<i>Geranium pusillum</i>	1
	<i>Lapsana communis</i>	1
	<i>Juncus effusus</i>	1
	<i>Tripleurospermum inodorum</i>	1
	<i>Ranunculus bulbosus</i>	1
	<i>Galium sp.</i>	1
	<i>Trifolium pratense</i>	1
	<i>Lotus corniculatus</i>	1
	<i>Anthoxanthum odoratum</i>	1
	<i>Tragopogon pratensis</i>	1