Hocombe Mead Vegetation Survey 2008

The vegetation of Hocombe Mead LNR was surveyed by Miles King, Conservation Manager for the Grasslands Trust on May 29th 2008 (woodland compartments) and June 26th 2008 (grassland compartments). Survey was carried out to phase one standard for the woodlands, although an assessment of Phase 2 habitats has been made, based on the survey. Survey of grassland compartments was made to phase 2 standard for notable areas, notably the rush pasture, meadowsweet mire and lesser pond-sedge communities. There was a small number of other NVC communities (e.g. open vegetation and ditch communities) also observed, but these stands were too small to warrant sampling.

Standard National Vegetation Classification nomenclature is used in this report.

Summary

Hocombe Meads Local Nature Reserve supports the following vegetation communities:

Grasslands/Mires

MG10 *Holcus lanatus – Juncus Effusus* Yorkshire fog – Soft rush rush-pasture
M23a *Juncus acutiflorus – Galium palustre* Sharp-flowered rush – Marsh bedstraw rush-pasture
M27 *Filipendula ulmaria-Angelica sylvestris* Meadowsweet-Angelica mire
S7 *Carex acutiformis* Lesser pond-sedge swamp

Woodlands

W10 *Quercus spp. - Pteridium aquilinum – Rubus fruticosus* Oak-bramble-bracken woodland
W7 *Alnus glutinosa – Fraxinus excelsior – Lysimachia nemorum* Alder-Ash-yellow pimpernel woodland
W1 *Salix cinerea-Galium palustre* Grey willow-marsh bedstraw woodland
W4 *Betula pubescens – Molinia caerulea* Downy birch-Purple moor-grass woodland
W16 *Quercus spp.- Betula spp.-Deschampsia flexuousa* Oak-Birch-wavy hair-grass woodland

Data to support the assignment of these communities can be found in Appendix 1.

Description

Hocombe Mead supports a relatively large number of vegetation communities considering it's small size (8.3ha). This diversity in large part reflects the varying topology and geology, as well as management history.

Woodlands

The area of woodland in the NE corner of the reserve is the most species-rich assignable to W10b *Anemone nemorosa* sub-community and supports a number of

ancient woodland indicators, including *Anemone nemorosa* wood anemone, *Polygonatum odoratum* Solomon's-seal, *Veronica Montana* wood speedwell and *Euphorbia amygdaloides* wood-spurge. In addition to the area where coppicing has been reinstated, the woodland along the stream in the far north of the reserve also supports this community, along with garden throw-outs from adjacent dwellings. This area is the ancient semi-natural woodland known as Eagle's copse.

The woodland on the slopes to the east side of the reserve is mostly more species-poor W10 on more acidic soils derived from abandoned heathland, as described in the management plan. This community extends all the way along the eastern edge of the reserve, until at its southern boundary it is a very narrow corridor. Some areas are dominated by Rhododendron.

On the steeper slopes adjacent to the open areas, where Rhododendron has been cleared, a slightly different woodland type (W16) has developed, typified by the presence of *Deschampsia flexuousa* wavy hair-grass, as well as a richer bryophyte flora. This area includes the patch of *Calluna vulgaris* heather.

In the southern central area of the reserve in the valley bottom, two separate types of wet woodland have developed. The principal wet woodland community here is W1 *Salix cinerea-Galium palustre* grey willow – marsh bedstraw woodland. Most of these stands also appear to be relatively recent in origin and are not particularly species-rich. A smaller area on the eastern side of the valley bottom, associated with peat accumulation, has developed a stand of W4 *Betula pubescens Molinia caerulea* Downy birch – Purple moor-grass woodland, supporting a more luxuriant ground flora in very boggy conditions. *Sphagnum palustre* marsh bog-moss was abundant here.

In the far southern section of woodland, around the southern boardwalk, a different woodland type has developed, W7 *Alnus glutinosa – Fraxinus excelsior – Lysimachia nemorum* Alder-Ash-yellow pimpernel woodland. This woodland appears more ancient than the previous stands of wet woodland, as it supports ancient woodland indicators such as *Anemone nemorosa* and *Veronica Montana*.

Along the western flank of the reserve there is more rather species-poor W10 woodland, with some Rhodendron, although much has been cleared already.

Grassland/Mire/Swamp Communities.

Of the four main grassland/mire communities surveyed three are rush-pastures or variants thereof. The main open area is mainly M23a *Juncus acutiflorus – Galium palustre* Sharp-flowered rush – Marsh bedstraw rush-pasture, with some species-rich stands, while other areas are less diverse, the latter possibly reflecting past woodland encroachment or times when grazing has ceased. It was interesting to note that some species noted in the 2000 survey eg *Succisa pratensis* devil's-bit scabious and *Achillea ptarmica* sneezewort were not recorded this time (though this may simply have been because an exhaustive survey was not carried out), while others such as *Lychnis flos-cuculi* ragged-robin and *Lythrum salicaria* purple-loosestrife were recorded this time but not in 2000. Indeed *Lythrum* appears quite abundant now.

While it is not possible to make any objective assessment of change from comparing the 2000 survey to this one, there are indications that the community has shifted from a species-poor one dominated by *Holcus lanatus* Yorkshire fog and *Juncus effusus* soft rush (ie MG10) towards a slightly more diverse community clearly referable to M23a.

The far northern section of this area of the reserve is still more species-poor is closer to MG10 *Holcus lanatus – Juncus Effusus* Yorkshire fog – Soft rush rush-pasture than M23; this area also supports large stands of Chamaerion angustifolium Rosebay-willowherb and has more *Rubus fruticosus* bramble brakes. This may reflect a recent shift from willow scrub to rush-pasture with fire sites for burning cleared scrub. Associated with this community was also a small area of W24 Rubus fruticosus bramble underscrub (mapped but not sampled).

To the south of this main open area there are 2 almost contiguous areas of S7 *Carex acutiformis* Lesser pond-sedge swamp on either side of the stream. The larger area occurs to the west of the stream, as a clearing in the willow-carr, while there is a smaller patch on the east side of the stream. Neither of these stands is species-rich and have probably developed from former rush-pasture areas as a result of abandonment.

The third area is a relatively recently created clearing to the south of the reserve, maintained by mowing. This supports an interesting community transitional between M23 and M27 *Filipendula ulmaria-Angelica sylvestris* Meadowsweet-Angelica mire. The tendency towards M27 is greatest at the southern end of the clearing, where *Filipendula ulmaria* meadowsweet becomes dominant. These stands are quite species-rich in places and the profusion of different flowers provides a rich nectar source for invertebrates.

MK 17/10/08