S25 Phragmites australis-Eupatorium cannabinum tall herb fen (c) Cladium mariscus sub-community

Location & Substrate:

This stand includes a linear strip of vegetation running along the edge of the M13 of Stand 9. Small patches of the same community also appear amongst the W5 woodland of Stand 17 and in a mosaic with the S24 of Stand 14. The ground height is approximately 22.39m AOD.

The water table is below the surface in the summer months.

Structure:

The vegetation is tall (120cm in height) and dense, with a heavy leaf litter and some *Alnus glutinosa* and *Salix* saplings invading around the edges.

Composition:

This community is marked by the abundance of *Cladium mariscus*, amongst which *Phragmites australis* is subordinate in cover. The stand has a sparse lower tier of vegetation where *Calamagrostis canescens*, *Mentha aquatica*, *Juncus subnodulosus* and *Equisetum palustris* are constant. Although the sward has a rank appearance, the continued cutting of the vegetation every 4 years is sufficient to permit a moderate diversity of plants including tall herbs such as *Filipendula ulmaria*, *Lythrum salicaria*, *Eupatorium cannabinum* and *Angelica sylvestris* as well as even small amounts of *Schoenus nigricans*.

Bryophytes are very sparse here with only Calliergon cuspidatum and Eurhynchium praelongum being recorded.

The floristic table for Stand 13 is shown with Stand 14 for comparative purposes.

Community Affinities:

The overall appearance of the stand is one of S25 *Phragmites-Eupatorium* tall herb fen of the *Cladium* sub-community. At no point is the *Cladium* sufficiently dense to be classified as the internationally important S2 *Cladium mariscus* swamp.

The lower tier of vegetation including Calamagrostis canescens, Galium uliginosum and Carex acutiformis has affinities to S24c Phragmites-Peucedanum tall herb fen of the Symphytum sub-community. However, both the absence of Galium palustre, Peucedanum palustris and Iris pseudacorus here, and the abundance of Cladium make this affinity insufficient to classify the stand as S24.

Distribution & Conservation Value:

S25 is a widespread community throughout England and Wales, although its distribution has become somewhat scattered. The only species of note recorded within the stand are *Sanguisorba officinalis* and *Schoenus nigricans*. However this is the only area where *Cladium mariscus* approaches any substantial abundance and therefore is of botanical interest.

Condition & Changes Since 1991 Survey:

In 1991 this stand was not separated from the rest of the tall herb vegetation of Old Fen (known then as Stand 9). The continued presence of *Schoenus* in this stand even today may indicate that it was once part of the richer fen/mire communities before *Cladium* was allowed to become dominant. Since the 1991 survey (using those quadrats taken in the same approximate area (i.e. quadrats 9.2 and 9.5) *Cladium* appears to be increasing in abundance, as does *Calamagrostis canescens*, *Eupatorium cannabinum* and *Equisetum palustre*. However some of the lower tier vegetation such as *Filipendula ulmaria* and *Molinia caerulea* appear to be declining. In fact the overall reduction in species-richness of the stand is likely to be a result of the increasing dominance of *Cladium* in recent years despite cutting on a four year rotation. It is therefore advisable that cutting be increased in frequency in this area if possible.