

S16

Sagittaria sagittifolia swamp

Synonymy

Sagittario-Sparganietum emersi R.Tx. 1937 p.p.

Constant species

Sagittaria sagittifolia.

Rare species

Spirodela polyrhiza.

Physiognomy

This community comprises stands which have *Sagittaria sagittifolia* as the dominant emergent. Other species are only occasional and the most frequent are various duckweeds. Submerged aquatics such as *Hydrocharis morsus-ranae* or *Sparganium emersum* and other swamp dominants such as *Glyceria maxima* and *Sparganium erectum* may be locally abundant.

Habitat

S. sagittifolia is most characteristic of moderately deep eutrophic waters and soft silty substrates in wide dykes, canals and high-order streams. Although typical of standing or slow-moving waters, the early, submerged strap-shaped leaves are quite resistant to turbulence. Some non-eutrophic pollutants damage the species (Haslam 1978).

Zonation and succession

The community seems to be most frequently encountered as a fringe to other swamp communities such as the *Scirpetum lacustris*, *Glycerietum maximae* and *Sparganietum erecti*.

Distribution

Stands of *S. sagittifolia* have a scattered occurrence through the central and southern lowlands of England but the susceptibility to pollution may have reduced its distribution in recent years.

Affinities

The community is similar to *S. sagittifolia* vegetation described from Germany (Tüxen 1937) and The Netherlands (Westhoff & den Held 1969).

Floristic table S16

<i>Sagittaria sagittifolia</i>	V (5–10)
<i>Lemna minor</i>	II (3–4)
<i>Lemna trisulca</i>	II (3)
<i>Spirodela polyrhiza</i>	I (4)
<i>Glyceria maxima</i>	I (4)
<i>Scirpus lacustris lacustris</i>	I (4)
<i>Mentha aquatica</i>	I (5)
<i>Sparganium erectum</i>	I (1)
<i>Glyceria fluitans</i>	I (6)
<i>Hydrocharis morsus-ranae</i>	I (3)
<i>Sparganium emersum</i>	I (4)
<i>Stachys palustris</i>	I (4)
<i>Galium palustre</i>	I (1)
<i>Ranunculus repens</i>	I (1)
<i>Equisetum palustre</i>	I (1)
<i>Callitriche hamulata</i>	I (1)
Number of samples	6
Number of species/sample	5 (1–11)
Vegetation height (cm)	20
Vegetation cover (%)	69 (40–100)