
S18

Carex otrubae swamp

Caricetum otrubae Mirza 1978

Synonymy

Caricetum vulpinae R.Tx. 1947 p.p.

Constant species

Carex otrubae.

Physiognomy

The *Caricetum otrubae* comprises often narrow and fragmentary stands of marginal vegetation in which *Carex otrubae* is the most abundant species, generally forming an open cover of scattered tufts. No other species is frequent throughout and there is a great variety of associates.

Sub-communities

***Carex otrubae* sub-community.** Here *C. otrubae* forms a patchy cover interspersed with tussocks of *Juncus effusus* and/or tall herbs such as *Epilobium hirsutum*, *Iris pseudacorus* and *Lythrum salicaria*. Other swamp dominants like *Sparganium erectum* and *Carex acutiformis* may be locally prominent and there are records at low frequency for a wide range of species of water margins and damp mesotrophic grasslands.

***Atriplex prostrata* sub-community.** *C. otrubae* forms a generally more complete cover in this sub-community with scattered *Atriplex prostrata* and a low patchy mat of *Agrostis stolonifera*. The few other species which occur are generally those characteristic of disturbed damp places.

Habitat

This vegetation is characteristic of the clayey margins of standing or slow-moving and moderately eutrophic waters. The *Atriplex* sub-community extends the distri-

bution of the community to the saline water margins of ditches and pools associated with the salt industry.

Zonation and succession

The *Caricetum otrubae* characteristically forms a narrow zone between open water and damp mesotrophic grasslands like the *Holco-Juncetum*. It may form patchy mosaics with other shallow-water swamps such as the *Sparganietum erecti* and the *Carex pseudocyperus* community.

Distribution

The *C. otrubae* sub-community has a scattered distribution throughout the English and Welsh lowlands and the *Atriplex* sub-community is restricted to the inland saline habitats of Cheshire and Worcestershire. To the north, *C. otrubae* becomes progressively more restricted to coastal habitats and upper salt-marsh grasslands.

Affinities

The freshwater *C. otrubae* sub-community is very similar to the *C. pseudocyperus* swamp and both of these show some affinities with the damp mesotrophic grasslands of the *Holco-Juncion*. The *Atriplex* sub-community shows affinities with some communities of the upper salt-marsh such as the *Elymetum repentis maritimum* and the *Oenanthe lachenalii* sub-community of the *Potentillo-Festucetum arundinaceae*. Some authorities (e.g. Westhoff & den Held 1969) consider *C. otrubae* to be a characteristic species of the Elymo-Rumicion crispi, into which the similar *Caricetum vulpinae* R.Tx. 1947 has been placed. Although *C. vulpina* grows in similar habitats to *C. otrubae* it is a much rarer species in Britain (Jermy *et al.* 1982) and was not recorded in these samples.

Floristic table S18

	a	b	18
<i>Carex otrubae</i>	V (4–9)	V (8–9)	V (4–9)
<i>Juncus effusus</i>	III (3–4)	I (6)	II (3–6)
<i>Epilobium hirsutum</i>	II (3–4)		I (3–4)
<i>Galium aparine</i>	II (1–3)		I (1–3)
<i>Iris pseudacorus</i>	II (4–5)		I (4–5)
<i>Lythrum salicaria</i>	II (3–4)		I (3–4)
<i>Sparganium erectum</i>	II (2–5)		I (2–5)
<i>Achillea millefolium</i>	I (2)		I (2)
<i>Alisma plantago-aquatica</i>	I (1)		I (1)
<i>Angelica sylvestris</i>	I (3)		I (3)
<i>Cardamine pratensis</i>	I (1)		I (1)
<i>Carex acutiformis</i>	I (6)		I (6)
<i>Ceratophyllum demersum</i>	I (5)		I (5)
<i>Dactylis glomerata</i>	I (3)		I (3)
<i>Elymus repens</i>	I (2)		I (2)
<i>Epilobium angustifolium</i>	I (1)		I (1)
<i>Equisetum arvense</i>	I (1)		I (1)
<i>Equisetum palustre</i>	I (3)		I (3)
<i>Equisetum telmateia</i>	I (6)		I (6)
<i>Eupatorium cannabinum</i>	I (4)		I (4)
<i>Filipendula ulmaria</i>	I (3)		I (3)
<i>Galium uliginosum</i>	I (2)		I (2)
<i>Geranium dissectum</i>	I (3)		I (3)
<i>Juncus acutiflorus</i>	I (5)		I (5)
<i>Lotus uliginosus</i>	I (4)		I (4)
<i>Mentha aquatica</i>	I (4)		I (4)
<i>Phragmites australis</i>	I (6)		I (6)
<i>Poa annua</i>	I (2)		I (2)
<i>Poa pratensis</i>	I (3)		I (3)
<i>Potentilla reptans</i>	I (3)		I (3)
<i>Ranunculus repens</i>	I (1)		I (1)
<i>Rubus fruticosus</i> agg.	I (4)		I (4)
<i>Rumex hydrolapathum</i>	I (4)		I (4)
<i>Scirpus maritimus</i>	I (3)		I (3)
<i>Solanum dulcamara</i>	I (4)		I (4)
<i>Vicia cracca</i>	I (4)		I (4)
<i>Vicia sativa nigra</i>	I (1)		I (1)
<i>Amblystegium riparium</i>	I (1)		I (1)
<i>Sium latifolium</i>	I (3)		I (3)
<i>Atriplex prostrata</i>		V (3–5)	III (3–5)
<i>Agrostis stolonifera</i>	I (1)	III (4–5)	II (4–5)
<i>Atriplex patula</i>		I (3)	I (3)
<i>Cirsium palustre</i>		I (1)	I (1)
<i>Juncus bufonius</i>		I (3)	I (3)
<i>Juncus bulbosus</i>		I (3)	I (3)

Floristic table S18 (*cont.*)

	a	b	18
<i>Plantago major</i>		I (1)	I (1)
<i>Rumex crispus</i>		I (1)	I (1)
<i>Sonchus arvensis</i>		I (1)	I (1)
<i>Brachythecium rutabulum</i>		I (3)	I (3)
<i>Cirsium arvense</i>	I (3)	I (1)	I (1–3)
<i>Galium palustre</i>	I (1)	I (3)	I (1–3)
<i>Typha latifolia</i>	I (4)	I (4)	I (4)
Number of samples	5	7	12
Number of species/sample	11 (6–17)	4 (2–10)	7 (2–17)
Vegetation cover (%)	88 (70–100)	92 (80–100)	90 (70–100)

a *Carex otrubae* sub-communityb *Atriplex prostrata* sub-community18 *Caricetum otrubae* (total)