
SM20

Eleocharis uniglumis salt-marsh community *Eleocharitetum uniglumis* Nordhagen 1923

Constant species

Eleocharis uniglumis, *Agrostis stolonifera*.

Physiognomy

Although *Eleocharis uniglumis* is a widespread minor constituent of a variety of damp transitional communities along the upper marsh fringes (Birks 1973, Adam 1976), it is here dominant in a species-poor association, similar in floristics and appearance to the *Blysmetum rufi*. There is often an extensive undercarpet of *Agrostis stolonifera* and *Juncus gerardii*, *Glaux maritima*, *Festuca rubra*, *Triglochin maritima*, *Potentilla anserina* and *Alopecurus geniculatus* all occur frequently and may be abundant in particular stands. As in the *Blysmetum*, cover is variable and algae and bryophytes may form a patchy carpet over the substrate surface.

Habitat

In Britain, the *Eleocharitetum* occurs most frequently in depressions in the upper marsh. Some of the most extensive stands occur in brackish marshes by the River Gilpin, Cumbria. Rarely, it occurs in what is a widespread habitat in Scandinavia, as a fringe of emergent

vegetation, as around the brackish and atidal Loch an Amadain in Skye.

Zonation and succession

The *Eleocharitetum* occurs patchily within other upper-marsh associations such as the *Juncetum gerardi* and it does not play a major role in salt-marsh succession.

Distribution

The association is a rare community on British salt-marshes occurring locally along the west coast from the Dovey estuary northwards.

Affinities

British vegetation dominated by *E. uniglumis* is clearly closely related to that described from Scandinavia (Gillner 1960, Tyler 1969b, Siira 1970) although the emergent stands in Britain lack the aquatic species characteristic of the *Eleocharetum* of, for example, the Baltic. Siira (1970) and Tyler *et al.* (1971) assign the association to the alliance *Eleocharion uniglumis*, and a sensible treatment of both the *Eleocharitetum* and the *Blysmetum rufi* would be to regard them as constituting, in this alliance, the brackish end of variation within the *Asteretea*.

Floristic table SM20

<i>Eleocharis uniglumis</i>	V (5–10)
<i>Agrostis stolonifera</i>	V (3–7)
<i>Glaux maritima</i>	III (2–5)
<i>Juncus gerardii</i>	III (3–6)
<i>Festuca rubra</i>	II (2–7)
<i>Triglochin maritima</i>	II (2–5)
<i>Alopecurus geniculatus</i>	II (2–6)
<i>Potentilla anserina</i>	II (2–7)
<i>Aster tripolium</i> (rayed)	I (2–3)
<i>Plantago maritima</i>	I (4)
<i>Armeria maritima</i>	I (2–3)
Algal mat	I (8)
<i>Carex extensa</i>	I (3)
<i>Trifolium repens</i>	I (3–6)
<i>Leontodon autumnalis</i>	I (2–3)
<i>Juncus articulatus</i>	I (3–6)
<i>Eleocharis quinqueflora</i>	I (2–3)
<i>Triglochin palustris</i>	I (2)
<i>Amblystegium riparium</i>	I (3)
<i>Carex nigra</i>	I (2–4)
<i>Hydrocotyle vulgaris</i>	I (3–8)
<i>Atriplex prostrata</i>	I (2–3)
<i>Samolus valerandi</i>	I (3–4)
<i>Carex distans</i>	I (3–4)
<i>Galium palustre</i>	I (3–4)
<i>Oenanthe lachenalii</i>	I (1–4)
<i>Scirpus maritimus</i>	I (2–3)
Number of samples	17
Mean number of species/sample	8 (4–22)
Mean vegetation height (cm)	22 (10–45)
Mean total cover (%)	90 (60–100)

