SM17

Artemisia maritima salt-marsh community Artemisietum maritimae Hocquette 1927

Synonymy

Festucetum littoralis artemisietosum Ghestem 1972; includes Halimionetum portulacoidis, terminal phase with Artemisia maritima Beeftink 1962.

Constant species

Artemisia maritima, Festuca rubra, Halimione portulacoides, Plantago maritima.

Rare species

Limonium binervosum, L. humile, Suaeda vera.

Physiognomy

This is a species-poor community of somewhat variable physiognomy. Stands are generally small and fragmentary but they range from rank grassy patches dominated by Festuca rubra with prominent Artemisia maritima to open bushy vegetation with A. maritima over low Halimione portulacoides. There is usually a little Plantago maritima; Limonium cf. vulgare and Puccinellia maritima are also frequent.

Habitat

The Artemisietum maritimae is an upper-marsh community occurring on a variety of substrates, though often in association with tidal litter and inwashed shell fragments. Its most usual habitat is on creek levees where it forms small patches on the usually heavy clay soils which frequently show organic enrichment in the upper part of the profile. It is also found on ridges and mounds on the upper marsh and sometimes forms a fringe along the foot of sea walls or around stands of Atriplici-Elymetum pycnanthi. Where such zones occur at the marsh/dune interface the substrate is often a coarse sand.

Most occurrences are on ungrazed marshes but this may be a reflection of the predominantly south-eastern distribution of the association.

Zonation and succession

The association is normally found as a patchy zone between the *Halimionetum* and *Atriplici-Elymetum pycnanthi*. Junctions with the former may be marked by an intermediate zone with abundant *Festuca rubra*. This zonation may reflect a succession related to increase in marsh height with sediment accretion.

Distribution

The Artemisietum is widespread in East Anglia and along the south coast and it extends north into Scotland. West coast occurrences are scattered and restricted mainly to ungrazed marshes.

Affinities

Traditionally, an Artemisia maritima community has not been distinguished in British accounts of salt-marsh vegetation (e.g. Chapman 1934, Tansley 1939) and some Continental authorities regard the community as a subdivision of the Halimionetum or Festucetum littoralis. Nonetheless, though British stands are generally fragmentary and united mainly by the prominence of Artemisia maritima, the major associates represent a distinctive assemblage of species. Furthermore, Continental stands of this vegetation are frequently far more extensive and floristically distinct than those in Britain. A British Artemisietum could thus be sensibly seen as a somewhat impoverished extension of an association which occupies a noteworthy floristic transition between a number of Puccinellion and Armerion communities.

Floristic table SM17

Artemisia maritima	V (3-9)
Festuca rubra	V (2-9)
Halimione portulacoides	IV (1-8)
Plantago maritima	IV (1–5)
Limonium cf. L. vulgare	III (2-6)
Puccinellia maritima	III (2-7)
Armeria maritima	II (2-4)
Glaux maritima	II (1-4)
Triglochin maritima	II (2-5)
Aster tripolium (rayed)	II (2–4)
Aster tripolium	I (1-3)
Cochlearia anglica	I (1-3)
Juncus gerardii	I (3-5)
Agrostis stolonifera	I (2-5)
Atriplex prostrata	I (2-3)
Elymus pycnanthus	I (2-4)
Suaeda vera	I (1–3)
Spergularia media	I (1–4)
Plantago coronopus	I (2-5)
Cochlearia officinalis	I (2)
Elymus repens	I (2-3)
Juncus maritimus	I (3-5)
Suaeda maritima	I (2-4)
Salicornia agg.	I (2)
Parapholis strigosa	I (2-4)
Hordeum marinum	I (3–4)
Number of samples	42
Mean number of species/sample	7 (2–12)
Mean vegetation height (cm)	19 (7–35)
Mean total cover (%)	98 (50–100)

