# **MG13**

# Agrostis stolonifera-Alopecurus geniculatus grassland

#### Synonymy

Ranunculus repens-Alopecurus geniculatus Ass. R.Tx. 1937; Rumici-Alopecuretum geniculati R.Tx. (1937) 1950 p.p.; Rumex crispus-Alopecurus geniculatus nodum Ivimey-Cook & Proctor 1966 p.p.; Wet alluvial meadows Duffey et al. 1974; Washlands and wet alluvial meadows Ratcliffe 1977; Alopecurus geniculatus vegetation Lee 1977.

#### **Constant species**

Agrostis stolonifera, Alopecurus geniculatus.

#### Physiognomy

The Agrostis stolonifera-Alopecurus geniculatus community comprises open and closed swards dominated by mixtures of the two constant grasses with a variety of occasionals which may be abundant in particular stands. These include Ranunculus repens, Holcus lanatus and Poa trivialis, Glyceria fluitans and, less frequently, G. plicata and G. declinata, a variety of Junci (most frequently J. effusus but also J. articulatus, J. acutiflorus, J. bufonius and J. gerardi) and the tall Rumices, R. crispus and R. conglomeratus. Polygonum hydropiper, Ranunculus sceleratus and Oenanthe fistulosa are distinctive at low frequency. Bryophytes are uncommon, although Brachythecium rutabulum is occasionally conspicuous.

### Habitat

The community occurs typically on silty circumneutral soils kept moist and sometimes waterlogged by periodic inundation with fresh water. Often it is found as fragmentary stands alongside sluggish streams and rivers and around pools in lowland pastures, especially where there is moderate poaching by stock. In some areas, however, as in the lowlands of eastern England, it occurs more extensively on the seasonally-inundated alluvium of the flood-plains of large rivers and its often lush herbage can provide valuable summer grazing and an occasional hay crop. On the washlands associated with

the drainage systems of the Fens, the community forms part of the patchwork of vegetation associated with a traditional regime of winter flooding and summer grazing. On the Ouse Washes, Cambridgeshire–Norfolk, the largest surviving stretch of washland, now managed by the Royal Society for the Protection of Birds, stands are sheep-grazed in summer to produce a short, tight sward which provides grazing for gathering wigeon (Anas penelope) and Bewick's swan (Cygnus bewickii). Controlled shallow flooding from dykes then creates ideal conditions for dabbling ducks and a further spring flooding transforms the sward to the renowned 'silver meadows' which, when re-exposed, are very rich in aquatic fauna attractive to migrant waders.

#### Zonation and succession

Small stands commonly form part of the often fragmentary sequences of communities which develop around fluctuating open waters in relation to frequency of inundation and the amount of disturbance by sediment movement and trampling. A frequent pattern is for an intact pasture sward (such as the typical variant of the typical sub-community of the Lolio-Cynosuretum) to give way through an intermediate (the A. geniculatus variant of the same vegetation) to the Agrostis-Alopecurus community on puddled soil around a pool or stream that is used by stock for watering. On moister silts which are more frequently inundated, this in turn may pass to more ephemeral inundation vegetation or to the Glycerietum fluitantis or related assemblages in the Glycerio-Sparganion.

In washlands, the community occurs in mosaics with the Glycerietum fluitantis, the Festuca rubra-Agrostis stolonifera-Potentilla anserina inundation grassland and, around dykes, the Phalaridetum arundinaceae and Glycerietum maximae.

Where the community occurs around areas of freshwater seepage on the upper salt-marsh, it may pass to more halophytic vegetation types in which A. stolonifera remains prominent.

### Distribution

The community is widely distributed throughout the British lowlands with the most extensive stands in eastern England.

#### **Affinities**

The Agrostis-Alopecurus community can be seen as one of the more stable inundation communities generally

placed in the Elymo-Rumicion crispi. Floristic variation within this alliance is closely related to frequency of inundation and the particle size of the inundated sediments and this community comprises the more intact and permanent swards developed on occasionally inundated substrates of fine particles. As such, its closest affinities among other mesotrophic grasslands are with the *Festuca-Agrostis-Potentilla* community.

## Floristic table MG13

Agrostis stolonifera	V (3–9)	Alopecurus pratensis	I (2)
Alopecurus geniculatus	V (3–9)	Festuca pratensis	I (1)
Ranunculus repens	II (2–9)	Atriplex prostrata	I (1)
•		Dactylis glomerata	I (2)
Holcus lanatus	II (2–5)	Caltha palustris	I (3)
Poa trivialis	II (2–7)	Deschampsia cespitosa	I (5)
Juncus effusus	II (2–5)	Carex ovalis	I (5)
Glyceria fluitans	II (1–5)	Leontodon autumnalis	I (1)
Glyceria declinata	I (3–7)	Juncus acutiflorus	I (3)
Glyceria plicata	I (5–8)	Carex panicea	I (3)
Juncus bufonius	I (2-4)	Bromus hordeaceus hordeaceus	I (2)
Juncus articulatus	I (3-5)	Cirsium arvense	I (2)
Festuca rubra	I (3-4)	Stellaria alsine	I (2)
Ranunculus flammula	I (2–3)	Oenanthe fistulosa	I (4)
Rumex crispus	I (1-3)	Myosotis scorpioides	I (3)
Anthoxanthum odoratum	I (1-3)	Valeriana dioica	I (1)
Mentha aquatica	I (2)	Ceratodon purpureus	I (1)
Polygonum hydropiper	I (2-4)		
Triglochin palustris	I (1-5)	Montia fontana	I (2)
Triglochin maritima	I (2-3)	Brachythecium rutabulum	I (5)
Juncus gerardi	I (3)	Stellaria neglecta	I (1)
Ranunculus sceleratus	I (3)	Rumex conglomeratus	I (1)
Potentilla anserina	I (2-5)	Number of samples	17
Poa annua	I (2)	Number of species/sample	8 (3–15)