
OV12

Poa annua-*Myosotis arvensis* community

Constant species

Agrostis stolonifera, *Myosotis arvensis*, *Poa annua*, *Poa trivialis*, *Polygonum aviculare*.

Physiognomy

Poa annua and *P. trivialis* are constant in the *Poa*-*Myosotis arvensis* community and the former in particular can have high cover. *Agrostis stolonifera* and *Elymus repens* are also very frequent overall and, among these grasses, are scattered plants of *Polygonum aviculare* and *Myosotis arvensis*. Other common associates include *Stellaria media*, *Chamomilla suaveolens*, *Ranunculus repens*, *Veronica persica* and *Anagallis arvensis*. More occasional are *Lamium purpureum*, *Bilderdykia convolvulus* and *Lolium perenne*.

Sub-communities

Typical sub-community. *Polygonum persicaria* and *Sonchus asper* are rather more frequent here with occasional *Urtica dioica*, *Dactylis glomerata*, *Lolium multiflorum*, *Chenopodium album* and *Atriplex patula*.

***Dicranella staphylina*-*Bryum* sub-community.** Among vascular plants, *Aphanes arvensis* and *Veronica arvensis* become frequent in this sub-community with occasional *Lapsana communis*, *Viola arvensis*, *Heracleum sphondylium* and *Trifolium repens*. However, the more striking feature over the surface of the soil is the variety and abundance of diminutive acrocarpous mosses. *Dicranella staphylina*, *Phascum cuspidatum*, various *Bryum* spp. (including *B. rubens*, *B. erythrocarpum*, *B. microerythrocarpum*, *B. violaceum* and *B. klinggraeffii*) are frequent with occasional *Pottia truncata*, *P. intermedia*, *Barbula convoluta* and *B. unguiculata*.

Habitat

The *Poa*-*Myosotis* community is characteristic of trampled and dunged areas within damp leys, pastures and recreational swards. In such situations, *P. annua* germinates very readily where seeding has been poor or where

trampling creates gaps. Its seed remains viable in the dung of cows and horses and can germinate in cattle dung (Hutchinson 1979). Compaction, periodic flooding and waterlogging also present no real hindrance to establishment (Hutchinson & Seymour 1982). Such moist conditions also favour the spread of associates like *Agrostis stolonifera*, *Poa trivialis* and *Ranunculus repens*. *Myosotis arvensis*, too, finds such situations very congenial for its germination, most of which occurs in autumn (Salisbury 1964). The *Dicranella*-*Bryum* sub-community is especially characteristic of early stages of colonisation or where bare soil patches persist.

Zonation and succession

Typically, the *Poa*-*Myosotis* community occurs as patches with Lolio-Plantaginion swards, often with the *Polygonum*-*Chamomilla* assemblage in moderately trampled places, the *Agrostis*-*Ranunculus* community where less disturbed swards are kept moist or the *Polygonum*-*Poa* community where water stands long in winter. Patches of *Urtica*-*Cirsium* vegetation may also figure.

Where the community occurs along paths, it can pass via patchy zones of the *Polygonum*-*Chamomilla* vegetation to the *Lolium*-*Dactylis* grassland or mown recreational swards of the Lolio-Plantaginion.

Renewed care of damaged leys or reseeded of bare and poached areas can lead to replacement of the community with Lolio-Plantaginion swards but continuing neglect can lead to a run-down of this vegetation into ranker weedy assemblages.

Distribution

The community occurs widely throughout the country.

Affinities

Vegetation of this type has not been described before from Britain and has no analogue in published accounts of weed communities from other parts of Europe. It can be placed in the Polygono-Chenopodion alliance or perhaps the Polygonion. Certainly, it is transitional between the Stellarietea and Plantaginetea.

Floristic table OV12

	a	b	12
<i>Poa trivialis</i>	V (1–5)	V (2–5)	V (1–5)
<i>Poa annua</i>	V (1–10)	V (2–10)	V (1–10)
<i>Polygonum aviculare</i>	IV (1–8)	V (1–3)	V (1–8)
<i>Myosotis arvensis</i>	IV (2–5)	IV (1–5)	IV (1–5)
<i>Agrostis stolonifera</i>	III (3–8)	IV (2–10)	IV (2–10)
<i>Sonchus asper</i>	III (1–3)	II (1–5)	II (1–5)
<i>Polygonum persicaria</i>	III (1–3)	II (2–3)	II (1–3)
<i>Urtica dioica</i>	II (1–2)	I (1)	I (1–2)
<i>Dactylis glomerata</i>	II (1–2)	I (2)	I (1–2)
<i>Lolium multiflorum</i>	II (2–3)	I (2)	I (2–3)
<i>Chenopodium album</i>	II (1–8)	I (2–3)	I (1–8)
<i>Atriplex patula</i>	II (1–3)	I (1)	I (1–3)
<i>Bryum</i> spp.*		IV (1–3)	III (1–3)
<i>Dicranella staphylina</i>		III (1–5)	II (1–5)
<i>Phascum cuspidatum</i>		III (1–5)	II (1–5)
<i>Aphanes arvensis</i>	I (1–3)	III (1–5)	II (1–5)
<i>Veronica arvensis</i>	I (2)	III (1–5)	II (1–5)
<i>Lapsana communis</i>	I (2)	II (1–7)	I (1–7)
<i>Viola arvensis</i>	I (2)	II (1–3)	I (1–3)
<i>Pottia truncata</i>		II (1–3)	I (1–3)
<i>Pottia intermedia</i>		II (1–3)	I (1–3)
<i>Barbula convoluta</i>		II (1–2)	I (1–2)
<i>Barbula unguiculata</i>		II (1–2)	I (1–2)
<i>Trifolium repens</i>		II (1–2)	I (1–2)
<i>Heracleum sphondylium</i>		II (1–2)	I (1–2)
<i>Stellaria media</i>	III (1–7)	III (1–7)	III (1–7)
<i>Chamomilla suaveolens</i>	III (1–4)	III (2–5)	III (1–5)
<i>Elymus repens</i>	III (2–6)	III (1–7)	III (1–7)
<i>Ranunculus repens</i>	III (1–3)	III (1–3)	III (1–3)
<i>Veronica persica</i>	II (1–5)	III (1–3)	III (1–5)
<i>Anagallis arvensis</i>	II (2–5)	III (1–3)	III (1–5)
<i>Matricaria perforata</i>	II (1–7)	III (2–7)	III (1–7)
<i>Lamium purpureum</i>	II (1–3)	II (2–3)	II (1–3)
<i>Bilderdykia convolvulus</i>	II (2–3)	II (1–2)	II (1–3)
<i>Lolium perenne</i>	II (1–5)	II (2–5)	II (1–5)
<i>Plantago major</i>	I (1–3)	II (1–3)	II (1–3)
<i>Convolvulus arvensis</i>	I (2–3)	II (2–5)	I (2–5)
<i>Cerastium fontanum</i>	I (1–2)	II (1–3)	I (1–3)
Number of samples	13	21	34
Number of species/sample	18	20	20

* Includes records for *Bryum rubens*, *B. erythrocarpum*, *B. microerythrocarpum*, *B. violaceum* and *B. klinggraeffii*.

a Typical sub-community

b *Dicranella staphylina*-*Bryum* spp. sub-community

12 *Poa annua*-*Myosotis arvensis* community (total)