
OV33

Polygonum lapathifolium-*Poa annua* community

Constant species

Poa annua, *Polygonum aviculare*, *Polygonum lapathifolium*, *Polygonum persicaria*.

Physiognomy

The *Polygonum*-*Poa* community includes open or closed stands of vegetation in which various knotweeds are the most characteristic feature. *P. persicaria*, *P. lapathifolium* and *P. aviculare* are all very common here and each can be abundant, often in locally dense, even more or less monodominant patches. *Poa annua* is also constant but not usually of extensive cover and there is often some *Stellaria media*, *Chenopodium album*, *Plantago major* and *Chamomilla suaveolens*. More bulky occasionals include *Elymus repens*, *Lolium perenne*, *Urtica dioica* and *Cirsium arvense* but none of these is more than locally prominent. Smaller herbaceous associates found at low frequency are *Viola arvensis*, *Anagallis arvensis*, *Ranunculus repens*, *Trifolium repens*, *Spergula arvensis* and *Veronica persica*, and there can be occasional scattered individuals of *Rumex crispus*, *R. obtusifolius*, *Sonchus asper* and *Euphorbia helioscopia*.

Habitat

This *Polygonum*-*Poa* community is characteristic of damp eutrophic soils in disturbed places such as gateways, tracks, farmyards and ill-managed leys, on dumped topsoil and made ground around building sites.

Compared with the *Rorippa-Filaginella* community, this vegetation is less dependent on long winter flooding to maintain extensive areas of ground then laid bare by a drop in the water table. Indeed, local impedence of drainage of rainwater, as on heavy or trampled ground, is sufficient to create suitable conditions for the rapid appearance of the annual knotweeds, *Poa annua* and weeds like *Stellaria media*, *Chenopodium album* and *Chamomilla suaveolens*. With seed sources often nearby, there is also opportunity for the (perhaps temporary) invasion of perennial weeds such as *Elymus repens*, *Cirsium arvense*, *Urtica dioica* and big *Rumex* spp., and forage plants like *Lolium perenne* and *Trifolium repens*.

The other feature which all these plants either require or flourish on is an abundance of nitrogen. In the context in which this vegetation develops, general fertility is high anyway, but there may also be local enrichment from defaecation by stock or run-off from local manure piles or organic waste.

Zonation and succession

Typically, the *Polygonum*-*Poa* community occurs on the wettest ground among patchworks of other kinds of weed vegetation, leys and pasture swards on farmland, recreation areas and along tracks.

Usually, it is the degree of wetness, disturbance and trampling which influences the character and disposition of these assemblages. Where the ground is somewhat drier but still trampled, the *Polygonum*-*Poa* community often gives way to some kind of Polygonion avicularis vegetation like the *Polygonum*-*Chamomilla* and *Poa*-*Plantago major* communities where *P. aviculare* and *Poa annua* remain constant but where the other annual knotweeds fade in importance. This can then pass to Lolio-Plantaginion swards where more trample-resistant plants remain common within a more extensive grassy matrix. Similar sequences to this develop where ill-sown leys are subject to much poaching in wet spring weather.

If irregular disturbance of damp, eutrophic soils remains a feature, as where farm vehicles churn up the ground, Polygono-Chenopodion communities can replace the *Polygonum*-*Poa* vegetation as with the *Poa*-*Senecio* or *Poa*-*Myosotis* communities.

Where disturbance or trampling of such habitats ceases, the *Polygonum*-*Poa* community is usually replaced by less ephemeral Polygono-Chenopodion weed vegetation, then by eutrophic tall-herb stands of the Artemisietea, usually dominated by *Urtica dioica* and large *Cirsium* spp.

Disturbance

This community is very common in suitable habitats throughout the lowlands.

Affinities

The *Polygonum*-*Poa* community contains those stands of ephemeral vegetation in which various species of *Polygonum* are prominent in the absence of *Bidens tripartita*. The high frequency and abundance of plants like *Stellaria media*, *Chenopodium album* and *Chamomilla*

suaveolens put this assemblage close the *Polygono*-*Chenopodion* alliance but it clearly belongs among the *Bidenton* communities. In some existing treatments, vegetation of this type is subsumed with the *Polygono*-*Bidentetum*.

Floristic table OV33

<i>Polygonum lapathifolium</i>	V (1–9)	<i>Dactylis glomerata</i>	I (1–4)
<i>Polygonum persicaria</i>	IV (2–7)	<i>Fumaria officinalis</i>	I (1–2)
<i>Polygonum aviculare</i>	IV (1–5)	<i>Galeopsis tetrahit</i> agg.	I (1–3)
<i>Poa annua</i>	IV (1–5)	<i>Galium aparine</i>	I (1–3)
<i>Stellaria media</i>	III (1–4)	<i>Myosotis arvensis</i>	I (1–2)
<i>Chenopodium album</i>	III (1–6)	<i>Poa trivialis</i>	I (1–4)
<i>Plantago major</i>	III (1–4)	<i>Raphanus raphanistrum</i>	I (1–2)
<i>Chamomilla suaveolens</i>	III (1–5)	<i>Senecio vulgaris</i>	I (2–3)
<i>Elymus repens</i>	II (1–4)	<i>Avena fatua</i>	I (1)
<i>Capsella bursa-pastoris</i>	II (1–6)	<i>Cirsium vulgare</i>	I (1)
<i>Cirsium arvense</i>	II (1–5)	<i>Equisetum arvense</i>	I (2–4)
<i>Lolium perenne</i>	II (1–6)	<i>Filaginella uliginosa</i>	I (1–3)
<i>Urtica dioica</i>	II (1–3)	<i>Chamomilla recutita</i>	I (2–5)
<i>Viola arvensis</i>	II (1–3)	<i>Medicago lupulina</i>	I (1–2)
<i>Anagallis arvensis</i>	II (1–3)	<i>Phleum pratense</i>	I (1)
<i>Ranunculus repens</i>	II (1–5)	<i>Bilderdykia convolvulus</i>	I (1–4)
<i>Rumex crispus</i>	II (1–3)	<i>Sinapis arvensis</i>	I (1–4)
<i>Sonchus asper</i>	II (1–2)	<i>Trifolium hybridum</i>	I (1–3)
<i>Trifolium repens</i>	II (1–3)	<i>Trifolium pratense</i>	I (1–4)
<i>Anthemis cotula</i>	II (3–4)	<i>Hordeum vulgare</i>	I (3–8)
<i>Euphorbia helioscopia</i>	II (1–4)	<i>Matricaria perforata</i>	I (1–7)
<i>Lapsana communis</i>	II (1–2)	<i>Achillea millefolium</i>	I (2)
<i>Rumex obtusifolius</i>	II (2–4)	<i>Atriplex prostrata</i>	I (3–4)
<i>Spergula arvensis</i>	II (2–7)	<i>Atriplex patula</i>	I (4–5)
<i>Veronica persica</i>	II (3–8)	Number of samples	21
<i>Agrostis stolonifera</i>	I (2–7)	Number of species/sample	17 (7–37)