OV32
Myosotis scorpioides-Ranunculus sceleratus community
Ranunculetum scelerati R.Tx. 1950 ex Passarge 1959

Constant species
Agrostis stolonifera, *Glyceria maxima*, *Myosotis scorpioides*, *Ranunculus sceleratus*, *Rorippa islandica*.

Physiognomy
The *Ranunculetum scelerati* includes open or closed carpets of vegetation, locally lush, in which mixtures of *Myosotis scorpioides*, *Ranunculus sceleratus*, *Rorippa islandica* and *Agrostis stolonifera* occur, often among scattered shoots of *Glyceria maxima*. *Veronica catenata*, *V. beccabunga*, *Nasturtium officinale* agg. and *Berula erecta* are occasional to frequent and there are sometimes small tussocks of *Deschampsia cespitosa*, *Holcus lanatus*, *Juncus inflexus* and *J. effusus*. Small patches of *Lemna gibba* or *Callitriche stagnalis* can occur scattered on wet mud or shallow pools among the vegetation. Typically, *Bidens tripartita* and knotweeds are, at most, occasional.

Habitat
This is a community of very nitrogen-rich, intermittently wetted and disturbed ground such as the heavily-manured surrounds of ponds and streams where stock water, along nutrient-enriched seasonal watercourses and over wet ditch dredgings.

As far as moisture and disturbance requirements are concerned, this community is probably essentially the same as the *Rorippa-Filaginella* vegetation, being dependent on the exposure of moist soils and clays in the warmer weather of spring when ephemerals are best placed to capitalise on the congenial conditions. Hence, disturbance may often come, not from flooding, but from trampling by stock or by physical operations like the cleaning of silt from streams and ditches. The frequent occurrence among the typical annuals of perennial plants is a reflection of the common occurrence of this assemblage as fragmentary stands among the fringes of water-margin or swamp vegetation. Noticeably, these include plants well able to regenerate from broken rhizome or stem fragments.

Ellenberg (1988) considered the *Ranunculetum scelerati* community to be more nitrophilous than the *Rorippa-Filaginella* vegetation. *R. sceleratus*, for example, can readily grow on the sludge beds of sewage farms, a habitat intolerable for many species.

Zonation and succession
The *Ranunculetum scelerati* is generally found as small, often fragmentary stands in mosaics and zonations with other inundation vegetation, water-margin communities and wet grasslands, the patterns being related to the extent of inundation, disturbance and enrichment.

Where dunging or other forms of eutrophication are absent or very localised around ponds and alongside streams, the community can give way to *Rorippa-Filaginella* vegetation on somewhat less fertile, periodically-inundated ground. At the water's edge, it frequently gives way to Glycerio-Sparganion assemblages like the *Glycerietum fluitantis* or stands dominated by *Nasturtium officinale* agg. or *Veronica beccabunga*, among which plants like *Myosotis scorpioides*, *Alisma plantago-aquatica* and *Berula erecta* can remain locally prominent. Ragged zonations between these mixtures of plants are very common along small lowland streams and ditches through silty and clay soils.

In other situations, the *Ranunculetum scelerati* can pass more directly to swamps like the *Glycerietum maximae* or to periodically inundated Elymo-Rumicion swards or damp Lolio-Plantaginion leys.

Distribution
The community can be found throughout the lowlands in suitable habitats.

Affinities
Vegetation of this type from elsewhere in Europe has generally been characterised as a *Ranunculetum scelerati* R.Tx. 1950 ex Passarge 1959, as with Oberdorfer (1983) and Pott (1992) in Germany, as a *Ranunculo scelerati-Rumicetum maritimi* Sissingh (1946) 1966, in Westhoff

& den Held (1969) from The Netherlands and White & Doyle (1982) from Ireland or as a *Rumicetum maritimi* Sissingh ex R.Tx. 1950 in Matuszkiewicz (1984) from Poland and Mucina *et al.* (1993) from Austria. *Rumex maritimus* was not in fact recorded in the samples available to us but it does occur as an occasional, scattered through the lowlands of England, and just into Wales and Scotland, in the kinds of habitats favoured by this community: it prefers nutrient-rich muds kept wet late into spring when it can appear in abundance. However this assemblage is named, it clearly belongs in the Bidention alliance.

Floristic table OV32

Myosotis scorpioides	V (2–5)
Ranunculus sceleratus	IV (3–9)
Agrostis stolonifera	IV (4–7)
Glyceria maxima	IV (3–5)
Rorippa islandica	IV (1–6)
Veronica catenata	III (2–7)
Nasturtium officinale	III (1–3)
Polygonum hydropiper	II (2–3)
Ranunculus repens	II (2–3)
Berula erecta	II (3–6)
Bidens tripartita	II (2–3)
Veronica beccabunga	II (3–4)
Deschampsia cespitosa	II (3–4)
Holcus lanatus	II (2–3)
Juncus effusus	II (3–5)
Juncus inflexus	II (3–5)
Lemna gibba	I (3–4)
Callitriche stagnalis	I (2–4)
Equisetum fluviatile	I (3)
Glyceria declinata	I (4–6)
Polygonum lapathifolium	I (2)
Mentha aquatica	I (6)
Bidens cernua	I (2)
Cirsium arvense	I (2)
Eleocharis palustris	I (4)
Epilobium palustre	I (3)
Poa pratensis	I (2)
Potentilla anserina	I (1)
Rumex obtusifolius	I (2)
Arctium minus agg.	I (3)
Carex paniculata	I (1)
Epilobium angustifolium	I (3)
Epilobium adenocaulon	I (2)
Iris pseudacorus	I (2)
Juncus bufonius	I (2)
Lycopus europaeus	I (5)
Phalaris arundinacea	I (2)
Poa annua	I (2)
Polygonum persicaria	I (3)
Ranunculus circinatus	I (2)
Rorippa sylvestris	I (3)
Rumex hydrolapathum	I (3)
Stachys palustris	I (3)
Trifolium repens	I (1)
Ranunculus peltatus	I (2)
Azolla filiculoides	I (3)
Number of samples	13
Number of species/sample	10 (7–14)

https://doi.org/10.1017/CBO9780511541834.101 Published online by Cambridge University Press