



Scientific name	<i>Cephaloziella nicholsonii</i> – <i>Cephaloziella stellulifera</i> mine-spoil community
Common name	Greater Copperwort – Heath Threadwort mine-spoil community
Community code	RH3A

Vegetation

This is a highly variable community of spoil heaps which lacks any constant species. It brings together, however, patchy vegetation characterised by the presence of several metallophytes. Much of the cover is provided by diminutive bryophytes with *Cephaloziella stellulifera* and *Cephaloziella nicholsonii* both frequent species. Other components of the bryophyte layer may include *Dicranella varia*, *Pohlia nutans* and *Jungermannia gracillima*. *Agrostis capillaris* and *Rumex acetosella* are the most likely vascular plants to be encountered.

Ecology

Only on metalliferous spoil associated with old mine workings is this community likely to be encountered, where the ground contains high concentrations of zinc, lead or copper.

Sub-communities

No sub-communities are described.

Similar communities

This is a rather difficult community to settle on with confidence as it is characterised by the presence of several diminutive bryophyte species which usually require fertile plants, a microscope and specialist expertise for a positive identification. Community RH3B can also occur on mine spoil, but bryophytes are a less important part of the flora there and *Silene uniflora* is invariably present.

Records and distribution

Number of records (all)

Clearly assigned:	16
Transitional:	6
Total:	22

Number of records (mapped)

2001-2017:	22
1986-2000:	0
1971-1985:	0
Pre-1971:	0
Total:	22

Number of hectads (most recent records)

2001-2017:	11
1986-2000:	0
1971-1985:	0
Pre-1971:	0
Total:	11

Number of hectads (all mapped records)

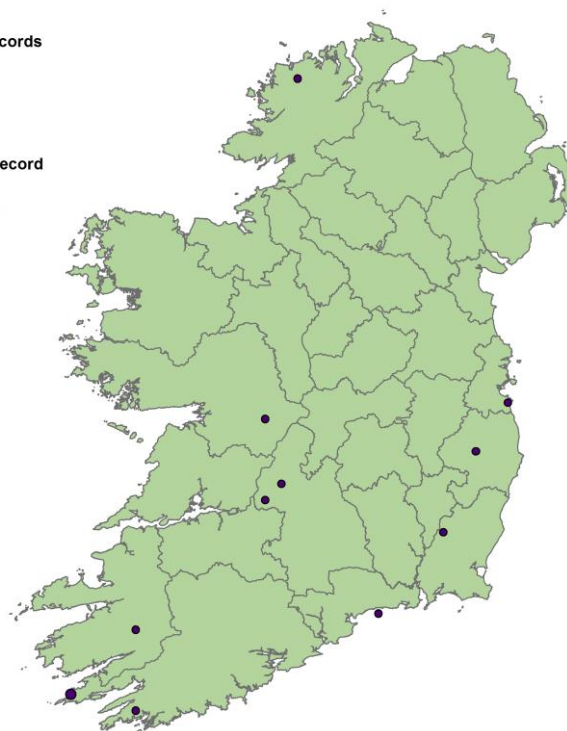
2001-2017:	11
1986-2000:	0
1971-1985:	0
Pre-1971:	0

Number of records

- 1-3
- 4-10
- 11-25
- 26+

Most recent record

- 2001-2017
- 1986-2000
- 1971-1985
- pre-1971



Synoptic table (n = 16)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Cephaloziella stellulifera</i>	III	4-(7)-8	<i>Anomobryum julaceum</i>	I	5-(5)-5
<i>Cephaloziella nicholsonii</i>	III	5-(7)-8	<i>Lophozia ventricosa</i>	I	2-(2)-2
<i>Agrostis capillaris</i>	II	1-(4)-4	<i>Pogonatum aloides</i>	I	2-(2)-2
<i>Dicranella varia</i>	II	3-(5)-7			
<i>Rumex acetosa</i>	II	3-(4)-5			
<i>Pohlia nutans</i>	I	2-(4)-5			
<i>Jungermannia gracillima</i>	I	5-(5)-6			
<i>Bryum pallescens</i>	I	3-(3)-3			
<i>Pohlia andalusica</i>	I	1-(1)-2			
<i>Bryum dichotomum</i>	I	2-(4)-4			
<i>Silene uniflora</i>	I	5-(5)-5			
<i>Cerastium fontanum</i>	I	3-(3)-3			
<i>Ceratodon purpureus</i>	I	5-(5)-5			
<i>Kindbergia praelonga</i>	I	1-(1)-1			
<i>Scleropodium purum</i>	I	2-(2)-2			
<i>Pilosella officinarum</i>	I	4-(4)-4			
<i>Hylocomium splendens</i>	I	1-(1)-1			
<i>Betula pubescens</i>	I	4-(4)-4			
<i>Sedum anglicum</i>	I	4-(4)-4			
<i>Pohlia annotina</i>	I	2-(2)-2			

Affinities

GHI: ED2 Spoil and bare ground

ZM: CL Trifolio-Geranietea sanguinei (31.3%) / CM Molinio-Arrhenatheretea (31.3%)

EUNIS: J6.51 Mining slag heaps

NVC: No meaningful affinity

Annex I: 6130 Calaminarian grassland

Proxy environmental data

Light: 6.6 Reaction: 4.7 Wetness: 5.4 Fertility: 2.2 Salinity: 0.1

Conservation value

Most examples of this vegetation correspond to the Irish interpretation of EU HD Annex I habitat 6130 Calaminarian grassland. It supports a range of rare and protected bryophyte species, such as *Cephaloziella nicholsonii* and *Pohlia andalusica*.

Management

This community is essentially unmanaged. Pressures include recreational activities and gradual succession to other vegetation types as metals are leached from the soil.

Key references

Holyoak, D. (2008) Bryophytes and metallophyte vegetation on metalliferous mine-waste in Ireland. (unpublished). National Parks and Wildlife Service, Dublin

Synopsis version: V1.0

Synopsis date: November 2019

Synopsis author(s): P.M. Perrin



Photo 1. RH3A *Cephaloziella nicholsonii* – *Cephaloziella stellulifera* mine-spoil community, Allihies, Cork
(R. Hodd, April 2018)

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Photo 2. RH3A *Cephaloziella stellulifera* – *Cephaloziella nicholsonii* mine-spoil community, Glendasan, Wicklow
(R. Hodd, February 2018)