

***Microthlaspi perfoliatum* (L.) F.K. Mey.**

Perfoliate Penny-cress

Native

GB & England: Vulnerable

Schedule 8

Section 41

GB Rare

VC5 Absent; VC6 Rare

An annual of bare areas on limestone, including arable fields, scree slopes and stony banks, also found in quarries and on railway banks. In Somerset only known near Charlton Mackrell, where it was first discovered in 1965 by C.A. Howe, in great profusion for about half a mile along the railway line. It was later found in the nearby quarry, although has not been seen there since 2000. In 2012 it was still present on the railway bank, and also on a bank beside the track alongside the railway, on a nearby roadside bank and on anthills at the edge of a playing field adjacent to the railway. In 2020 however, no plants could be found at the edge of the playing field, which had become smothered with ivy, or in the quarry, or on the railway bank. Over 200 plants were seen on the bank beside the track alongside the railway, and over a thousand plants were in flower along the south-facing roadside bank nearby, although none were found south of the railway bridge, where seen in 2012. *Microthlaspi perfoliatum* is largely restricted to sites on oolitic limestone of the Cotswolds in Oxfordshire and Gloucestershire, but in 1999 was discovered in Worcestershire on a shallow ridge of rhaetic limestone (Maskew, 2014), where it is considered native (Barnett & Rich, 2000). This species has declined at many native sites due to loss of habitat through lack of grazing and consequent scrub invasion, however it has spread into quarries and along railway lines within the native range and beyond. Rich *et al.* (1989) suggested that this species has been dispersed in association with the railways, either as seed in transported ballast or in the slipstreams of travelling locomotives, yet it seems unlikely that ballast would be brought to Somerset. Although the late date of discovery supports the suggestion that this species is an introduction here, and it was mapped as such by Preston *et al.* (2002), there is no evidence of this and the presumed native population found recently in Worcestershire supports a view that this species may also be native on the lias of Somerset.



Microthlaspi perfoliatum at Charlton Mackrell (2012). Photo: FJR

VC6

| | | | | |
|-------------------|------------|------|----------|---|
| Charlton Mackrell | ST534290 | 2000 | SRPG | 37 plants on low rock outcrops, and on tarmac |
| Charlton Mackrell | ST53442901 | 2012 | HJC, FJR | 51 pl on anthills/grass, N edge of playing field |
| Charlton Mackrell | ST53582909 | 2012 | HJC, FJR | 58 pl on railway bank inside railings, N of track |
| Charlton Mackrell | ST535290 | 2020 | HJC, FJR | 200+ pl on S-facing bank by track |
| Charlton Mackrell | ST53602910 | 2020 | HJC, FJR | Few pl on S-facing bank by track |
| Charlton Mackrell | ST53772920 | 2012 | HJC, FJR | 50 pl, E-facing bank S of bridge, Combe Lane |
| Charlton Mackrell | ST537292 | 2020 | HJC, FJR | 1000+ pl, E-facing bank N of bridge, Combe Lane |



Distribution of *Microthlaspi perfoliatum* in North Somerset (VC6), mapped using MapMate. Black dots are post-2000 records; red squares are 1987-1999, monad or tetrad records



Microthlaspi perfoliatum at Charlton Mackrell (2012). Photo: HJC