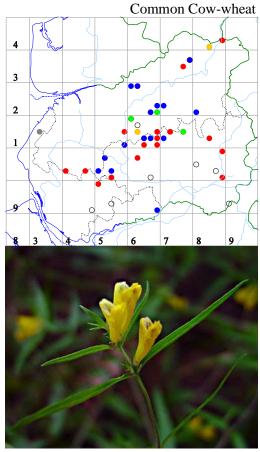
OROBANCHACEAE Broomrape family

Melampyrum pratense L. ssp. pratense



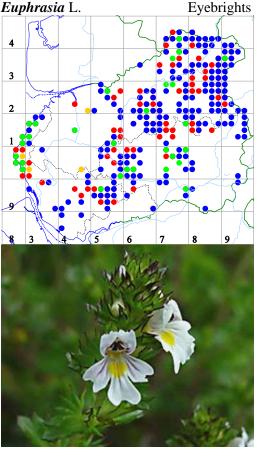
Pleasington DP Earl 2012

Status & distribution: Native, Near Threatened (Red List for England),

Axiophyte; declining and most frequent in the hill districts, especially in the West Pennine Moor district, very local elsewhere.

Habitat: On sandy soils within oak-birch woods, on acid grassland slopes and amongst dwarf shrubs on moorland. **Comments:** Note the lack of records from

the Sefton Coast (and of Merseyside) with the last record traced for the Sefton Borough being from Birkdale (W Waddington, 1938).

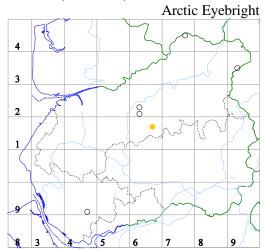


Rixton Clay Pits DP Earl 2010

Status & distribution: Native; widespread, locally common along the coast, about the 'industrial areas' and in the hill districts.

Habitat: Sand-dunes, grasslands, hill pastures; a colonist of former industrial land such as limestone quarries, alkaline waste beds, spoil heaps and canal towpaths.

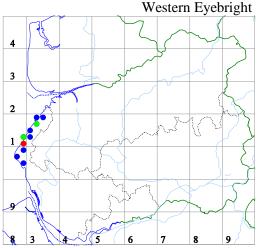
Euphrasia arctica Lange ex Rostrup ssp. *borealis* (F. Towns.) Yeo



Status & former distribution: Native, Vulnerable (Red List for England), Extinct or Data Deficient; The Carrs, Prescot (SJ49Q, Rev M.Toohey, n.d.); Brinscall (SD62F, n.d.) & Withnell (SD62G, n.d.) GH Hopley; Chatburn (SD74S, n.d.) & Boulsworth Moor (SD93H, n.d.) A Wilson; meadows near Belmont (SD61T, P Jepson, early 1980's) until the fields where agriculturally improved.

Habitat: Pastures and northern hay-meadows.

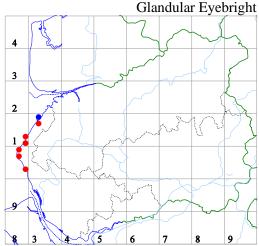
Euphrasia tetraquetra (Breb.) Arrond.



Status & distribution: Native, Near Threatened (Red List for England), Scarce (10); along the coast from Hightown to Southport Marin Lake.

Habitat: Sand-dunes and dune-slacks.

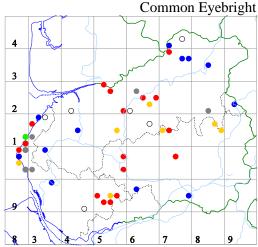
Euphrasia tetraquetra x E. nemorosa



Status & distribution: Native, Scarce (7); along the coast from Hightown to Southport Marine Lake.

Earliest record traced: Ainsdale duneslacks (SD21V, SM Walters, 1952). Habitat: Sand-dunes, coastal turf and dune-slacks.

Euphrasia nemorosa (Pers.) Wallr.



Status & distribution: Native, Near Threatened (Red List for England), Axiophyte; considered to be widespread

across the vice-county.

Habitat: Sand-dunes, grasslands, hill pastures, former industrial sites and canal towpaths.

Comments: Most of the *Euphrasia* L. records probably belong here.

Euphrasia nemorosa x E. confusa Status & former distribution: Native, Rare or Data Deficient; only recorded from the hill districts at Trawden (SD9337, V Gordon, 1987 det. AJ Silverside).

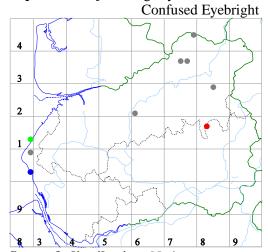
Comments: Probably still present in the vice-county and likely to be very under-recorded.

Euphrasia x areschougii = E. nemorosa x E. micrantha

Status & distribution: Native, Rare or Data Deficient; Lowton (SJ69I, MPG Tolfree, 2001) & Cadshaw Valley (SD71H, P Jepson, 2001, MANCH det. G Goussarova).

Habitat: Disused railway; upland grassland by a stream.

Euphrasia confusa Pugsley



Status & distribution: Native, Vulnerable (Red List for England); Rare (1) or Data Deficient; Cheesden (SD81I, J Lowell & MPG Tolfree, 1998, det. G Goussarova).

Former distribution: Hightown Dunes (SD21W, V Gordon, 1964, det. EF Warburg); Freshfield (SD21Z, V Gordon, 1967, LIV); Wheelton (SD62A, Rev CE Shaw, det. EF Warburg); Wiswell Moor (SD73N & SD73T, V Gordon, 1965, det. PF Yeo, LIV); Downham (SD74X, V Gordon, 1955, det. EF Warburg); (SD82P, Anon., det. EF Warburg).

Habitat: Known from the sand-dune system and also from unimproved pastures particularly in the hill districts.

Comments: Thought to be under-recorded in recent times.

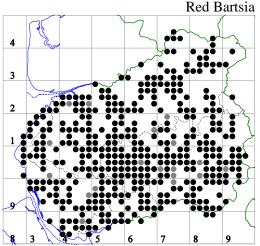
Euphrasia micrantha Rchb.

Slender Eyebright

Status & distribution: Native, Catlow Swamp (SD8936, A Turner, 1951); Cadshaw Valley, along the stream of Entwistle Reservoir (SD7315, P Jepson, 2001, MANCH).

[*Euphrasia ostenfeldii* (Pugsley) Yeo Comments: Recorded in a Stace checklist, but probably an error.]

Odontites vernus (Bellardi) Dumort.



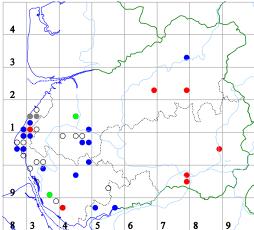
Status & distribution: Native Least Concern (Red List for England); widespread and locally common, strongly associated with the industrial areas.

Habitat: Sand-dunes, grasslands, spoil heaps, old clay pits, disturbed clay soil, old railway lines, canal towpaths, path sides and track sides.

Comments: Both ssp. *vernus* and ssp. *serotinus* (Syme) Corbière are recorded.

Parentucellia viscosa (L.) Caruel

Yellow Bartsia



Status & distribution: Native, Nationally Uncommon, Least Concern (Red List for England), Axiophyte; populations are persisting along the coast between Altcar Rifle Range (SD2804) and Freshfield Dune Heath (SD2909 & SD3009); locally abundant at Mere Sands Wood (SD41M, 1987 onwards); scarce elsewhere and often casual.

Habitat: Grasslands, sandy heaths, meadows, artificial habitats and former sand extraction sites.

Comments: Occasionally introduced as a grass seed casual.

[Rhinanthus angustifolius C. Gmelin Greater Yellow-rattle

Status & former distribution: Dubious; recorded from Northenden (*Buxton* 1849) which is likely to have been in vice-county 58 and the record may have been erroneous.]

Rhinanthus minor L. Yellow-rattle

Pickerings Pasture DP Earl 2008

Status & distribution: Native, Least Concern (Red List for England); locally common along the coast and in the hill districts, occasional to rare elsewhere.

Habitat: Meadows in the hill districts, sand-dunes and grasslands especially along river valleys.

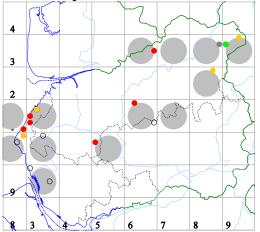
Comments: Increased substantially as an ingredient of sown wildflower mixes particularly in reclamation schemes, amenity areas and country parks.

Rhinanthus minor ssp. **stenophyllus** (Schur) O. Schwarz

Status & distribution: Native, Nationally Uncommon, Waiting List (Red List for England); Scarce (4) with records from Ainsdale (SD21W, V Jones, 2001); Birkdale (SD31C, MP Wilcox, 2003); Salthill Nature Reserve (SD7542, SJ Wynne, 2010); Chapel Lane Fields, Parbold (SD4910, B Hargreaves & J Simons, 2014).

Former distribution: Freshfield (SD20Z, V Gordon, 1955, LIV); Woodvale (SD3011, V Gordon, 1959, LIV, det. EF Warburg).

Pedicularis palustris L. Marsh Lousewort



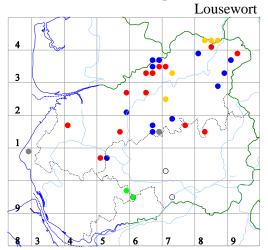
Status & distribution: Native, Vulnerable (Red List for England);

Critically Endangered at the vice-county level (1); only known at Upper Gilford Clough, near Trawden (SD93D, Lancashire Endangered Plant Group, 2007).

Former distribution: Birkdale Hills slack 19 (SD31C, PH Smith, 1994); Ainsdale Sandhills (SD21V, V Gordon, 1989); Thursden (SD93D, SJ Wynne, 1987); Easden Clough (SD82U, P Hornby, 1978); White Coppice Flush (SD61J, GP Morris & P Jepson, 1977); Freshfield (SD20Z, AJ Farmer, 1946); Gale Plantation (SD61W, *Greenlees & Holden* 1920); Jumbles (SD71H, T Greenlees 1908).

Habitat: In a moor-land flush; formerly more widespread in marshes, dune-slacks and bogs.

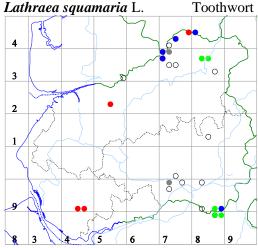
Pedicularis sylvatica L. ssp. sylvatica



Status & distribution: Native, Vulnerable (Red List for England),

Axiophyte; widely scattered, most frequent in the hill districts and the northeast, very local in the lowlands at Golborne Dale (SJ5996); Highfield Moss (SJ69C); Martin Mere (SD4117); Old Wharfes Reserve, Gathurst (SD51D & SD51I, EM Stephenson).

Habitat: Woodland borders, heaths, acid grasslands and old pastures, particularly on steep slopes in river valleys.



Status & distribution: Native, Least Concern (Red List for England); Scarce (14), very local in the north-east of the vice-county and in the Mersey valley near Stockport; rare elsewhere about Huyton and Farington (SD5423, 1999).

Former distribution: Once more frequent in the Ribble and Irwell catchment areas. **Habitat:** Woods, scrub and hedgebanks especially along river valleys and cloughs on basic soils; parasitic on *Corylus*

avellana, Ulmus, Populus, Acer pseudoplatanus, Alnus glutinosa and Fagus sylvatica.

Parrs Wood, Didsbury J Somerville 2008 Status & distribution: Neophyte-naturalised; Sunnyhurst Wood (SD62R, P Jepson, c. 1987 onwards); Parrs Wood (SJ89K, J Somerville, 2006); Pleasington Walled Garden (SD6427, Bio-diverse Society Project, 2016); Liverpool Festival Gardens (SJ3686, J Street, 2020). Habitat: Woodland and shrubberies. Comments: Native to the southern Mediterranean from Spain to Italy.

Orobanche rapum-genistae Thuill.

Greater Broomrape

Status & former distribution: Native, Nationally Scarce, Vulnerable (Red for List England); Extinct with historic records from Billinge Hill (SD50F, Mr. Holcroft, 1850); Allerton (SJ48D, H Shepherd & W Roscoe, *Withering* 1830); Eccles (SJ79P, J Martin, *Buxton* 1849); Middle Hulton (SD70C, W Evans, *Buxton* 1849).

Habitat: Parasitic on *Cytisus scoparius* and *Ulex europaeus*.

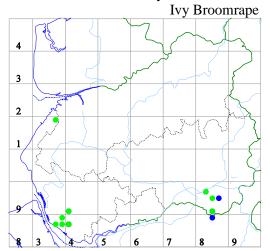
Orobanche alba Stephan ex Willd. Thyme Broomrape



Status & distribution: Native, Nationally Scarce, Least Concern (Red List for England); Critically Endangered at the vice-county level (1) at Salthill Quarry (SD7542, M Valentine, 2012).

Habitat: Limestone quarry.

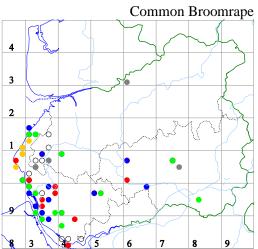
Orobanche hederae Duby



Status & distribution: Native, Least Concern (Red List for England); Scarce (11). Since discovered at locations listed below this species has been found at additional sites about Liverpool and Manchester. Note also the record for Churchtown, Southport (SD3619, 2020). Earliest records traced: Calderstones Park (SJ48D, E Hardy, 1984); Bridgewater Canal, Old Trafford (SJ8297, J Lowell, 2006) where now locally dominant.

Habitat: Parasitic on ivy in parks and along a canal towpath. The main host might be *Hedera* 'Hibernica'.

Orobanche minor Sm.



Status & distribution: Native, Least Concern (Red List for England), Axiophyte; Occasional along the coast from Waterloo to Birkdale; established inland near St. Helens, Wigan and Bolton. Habitat: Sand-dunes, industrial spoil heaps, railway sidings, flowerbeds and shrubberies; formerly a feature of clover fields.

Comments: Most records may be of ssp. minor. Plants growing on Brachoglottis 'Sunshine' at locations such as outside the Park Hotel in Birkdale village (SD31H, DP Earl) are probably var. compositarum Pugsley with this variety also having been recorded from Nob End (SD7406, V Gordon, 1961 & by DH Valentine, 1971, growing on Red Clover MANCH) as well as at Aspull (SD6007, J Lowell, 1998). Plants occurring in the grounds of Walton Prison (SJ39N, JA Wheldon, 1901) as a parasite on Campanula medium when recorded as var. maritima (Pugsley) Rumsey & Jury (Carrot Broomrape) which has now been raised to the rank of ssp. maritima (Pugsley) Rumsey.

Orobanche Broomrape Status & distribution: Casual; A species occurred with tomato plants at The Firs (SJ8594, O Hughes, 2022).