

CALAMOPHYTES HORSETAILS

EQUISETACEAE Horsetail family

Equisetum hyemale L. ssp. *hyemale*

Rough Horsetail

Status & distribution: Native, Nationally Uncommon, Least Concern (Red List for England); SCINWE, Rare (1), occurring only by the River Calder, Whalley (SD73H, P Jepson, c.1972 onwards).

Former Distribution: Prestwich (SD80B, CJ Wild, 1877, MANCH); near Warrington (*Dickinson* 1872).

Habitat: Woodland and scrub, on a steep clay bank.

Comments: The historic records were formerly dismissed by Travis and were not listed in *Savidge et al* (1963).

Equisetum praealtum Raf.

Tall-scouring Rush

Status & distribution: Neophyte-naturalised and increasing. This vigorous North American subspecies occurs by the large pond at Edge Hill University (SD4207, West Lancashire Wildlife Bioblitz, 2010); an ornamental pond east of Springfield Farm, Walmersley (SD7913, DP Earl & J Earl, 2010); Brookfield Lane, Aughton (SD3904, J Styles, 2019); Walton Park (SD5526, DP & J Earl, 2021). Plants at Scutchers Acre, Burscough (SD4510, G Clarkson, 2020) are also thought to be this subspecies.

Habitat: Pond margins.

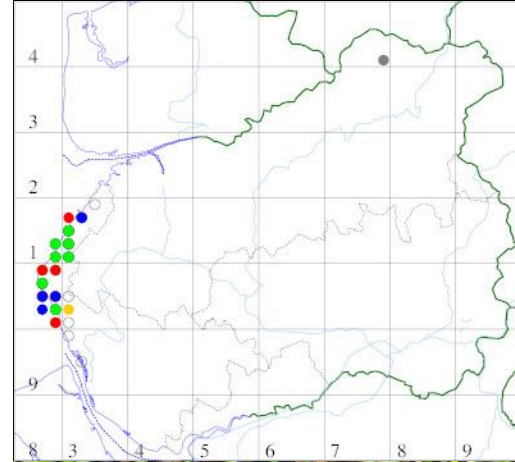
Comments: Native to eastern Asia, North America and Greenland. Synonyms include *Equisetum hyemale* L. ssp. *affine*.

Equisetum x meridionale (Milde) Chiov. = *E. ramosissimum* Desf. x *E. variegatum* Schleich. ex F. Weber & D Mohr

Status & former Distribution: Native, perhaps extinct in South Lancashire. There are 19th century specimens from Crosby (SJ39E) and Southport SD31) at the BM(NH) (Rumsey & Spencer, 2012; Stace *et al.*, 2015).

Habitat: Probably occurred in dune-slacks.

Equisetum variegatum Schleich. ex F. Weber & D Mohr Variegated Horsetail





Birkdale PH Smith

Status & distribution: Native, Nationally Uncommon, Least Concern (Red List for England); SCINWE, Scarce (13), once frequent but declining along the Sefton coast from Hightown to Southport.

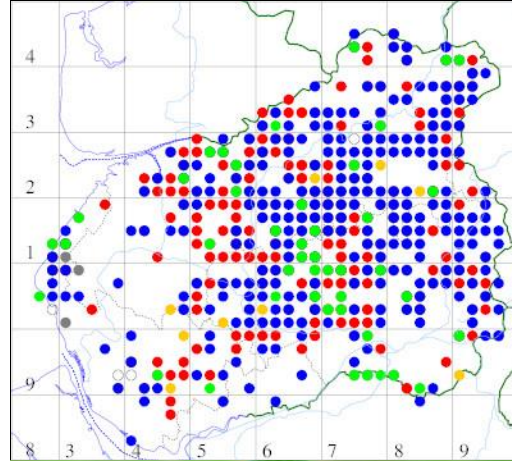
Former Distribution: Pendle Moor (SD74V, A Turner, n.d.).

Habitat: Dune-slacks, lower slopes of dunes, moorland flushes.

Comments: This species was lost from north Liverpool sites due to urbanisation. PH Smith has observed a significant decline of *E. variegatum* including losses of sites where the plant occurred 20-30 years ago. These losses are linked to vegetation overgrowth and scrub development which are probably associated, in part, with aerial deposition of nitrogen. *E. variegatum* has a low Ellenberg nitrogen (N) value of 3, indicating adaptation to "more-or-less infertile sites".

In view of Turner's observation plants should be looked for within upland flushes in the hill districts.

Equisetum fluviatile L. Water Horsetail



Ainsdale DP Earl 2008

Status & distribution: Native, Least Concern (Red List for England). Most frequent in the hill districts, occasional at lower altitudes, locally frequent along the Sefton coast.

Habitat: Reservoirs, mill lodges, marl pits, ditches, ponds, flushes, flushes, mires, and dune-slacks.

Equisetum x *dycei* C.N. Page = *E. fluviatile* L. x *E. palustre* L.

Distribution: Native, Rare (2). Occurs at Birkdale Dunes (SD31C, MP Wilcox & P Acock, 2003, det. P Acock); Sunnyhurst (SD62R, P Jepson, 2005, det. C.N. Page).

Habitat: Dune-slack; open shale-clay, on sparsely vegetated ground.

Comments: This hybrid is probably under-recorded and possibly confused with *E. x litorale*. This hybrid is said to be short lived. Whilst the Birkdale population is robust and extensive the Sunnyhurst population is weak and confined to a small area.



Tagg's Island, Birkdale PH Smith 2008

Equisetum x *willmotii* C.N. Page = *E. fluviatile* L. x *E. telmateia* Ehrh.

Status & distribution: Native, Endemic, Scarce (4). Recorded by P Jepson from a ditch and adjacent habitat on the edge of Darwen Moors (SD62R, 2005); covering about half a hectare in a field by Billy Brook, Turton (SD71H, 2005); Oswaldtwistle (SD72I, 2006); Ashworth Valley (SD82I, 2008). All records conf. C.N. Page.

Former Distribution: Southport (SD31, V Gordon, c. 1970's, det. C.N. Page, E).

Habitat: Ditch banks and flushes; perhaps formerly found in a dune slack.

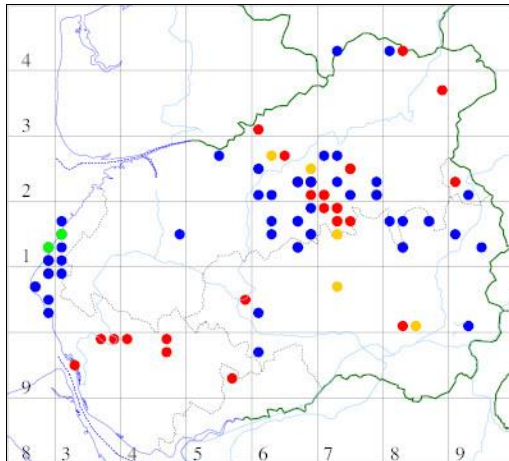
Comments: Possible overlooked.



Formby M Knowles 2007

Equisetum x *litorale* Kuhl. ex Rupr. = *E. fluviatile* L. x *E. arvense* L.

Shore Horsetail

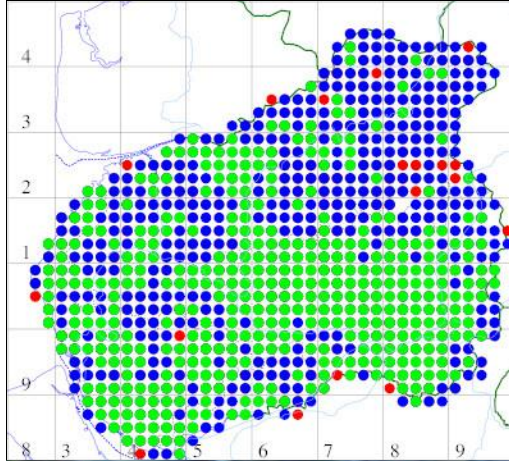


Status & distribution: Native, Axiophyte. Locally frequent along the coast between Hightown and Birkdale, occasional in the lowlands, locally common in the hill districts.

Earliest record traced: Dune-slacks, Formby (SD20T, JA Wheldon, c. 1912).

Habitat: Dune-slacks, ditches near the sea, damp ground, wet woodland, reservoirs, mill lodges and flushes in the hills especially in iron rich springs.

Equisetum arvense L. Field Horsetail



Southport DP Earl 2008

Status & distribution: Native, Least Concern (Red List for England); common and widespread at lower altitudes, rare on the highest ground.

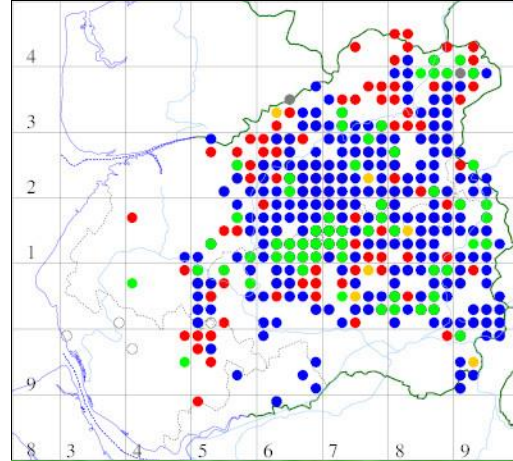
Habitat: Disturbed ground, roadsides, flushes, dune-slacks, ditches, and pond margins.

Comments: Several varieties have been recorded. Cones are occasional on branched green shoots as at Smithills (SD61V).

Equisetum x *rothmaleri* C.N. Page = *E. arvense* L. x *E. palustre* L.

Status & distribution: Native, Rare (1). Close to a reservoir on Darwen Moors (SD6822, MJY Foley, 2008, det. C.N. Page).

Equisetum sylvaticum L. Wood Horsetail

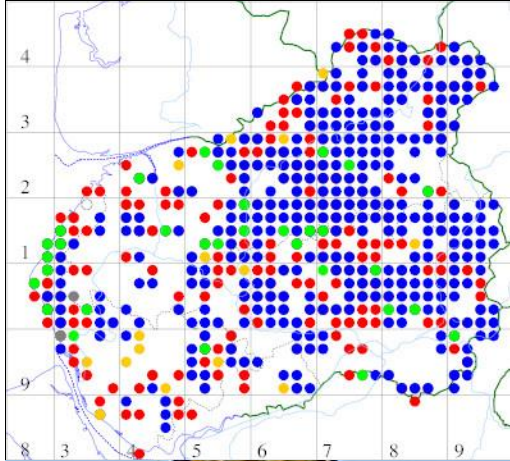


Cuerden Valley DP Earl 2020

Status & distribution: Native, Least Concern (Red List for England); most frequent in the hill districts, growing luxuriantly in the West Pennine Moors; in the river valleys and cloughs on the coal measures; rare at lower altitudes.

Habitat: Acid grassland slopes, flushed meadows, cloughs, and damp woodlands.

Equisetum palustre L. Marsh Horsetail



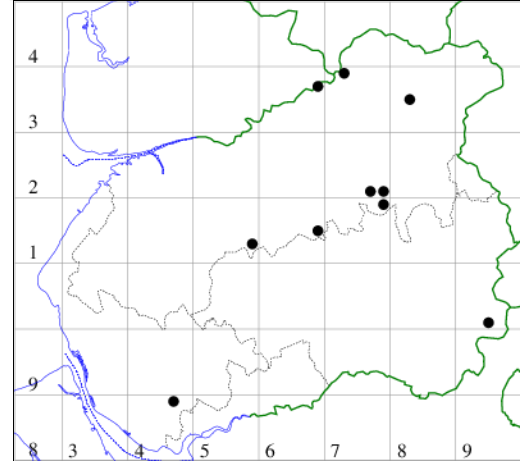
Piethorne Valley J Somerville 2006

Status & distribution: Native, Least Concern (Red List for England); widespread, most frequent along the coast and in the hill districts. There is a record limited to 10km precision for SJ68 where plants are known to occur at the Woolston Eyes but on the Cheshire side of the old River Mersey.

Habitat: Margins of ponds, ditches, damp meadows, in dune-slacks and upland flushes.

Comments: Several forms and varieties were recorded in the past.

Equisetum x *font-queri* Rothm. = *E. palustre* L. x *E. telmateia* Ehrh.



West Pennine Moors DP Earl

Status & distribution: Native, Scarce (10), occurring in the north-east from (SD5812) to (SD8235); only known elsewhere at Silver Springs (SD90K, A Bamforth, 2003) and Cronton Quarry (SJ48U, Liverpool Botanical Society, 2016).

Habitat: Flushed neutral grassland and habitats open to recent colonisation.

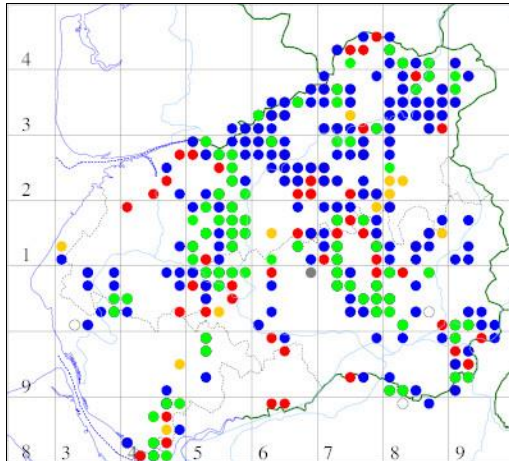
Comments: First confirmed from material collected from Lumb and Irwell Vale (SD72V, P Jepson, 2002, det. C.N. Page) but the populations were known for some time prior to this date. The spores are partly abortive. Populations may not be closely associated with either of the parent species.

clay cliffs along the Mersey estuary, occasional as a colonist of waste ground.

Comments: Plants from Oglet Shore (SJ48K, 1947) were determined as var. *serotinum* A. Braun by Miss PA Jones.

Equisetum telmateia Ehrh.

Great Horsetail



Chorley DP Earl 2008

Status & distribution: Native, Least Concern (Red List for England); Axiophyte, locally frequent especially along the river valleys.

Former distribution: Liverpool (SJ39, JH Lewis, 1874, MANCH).

Habitat: Wet woodland, wooded cloughs, moorland flushes, shaded banks, flushed