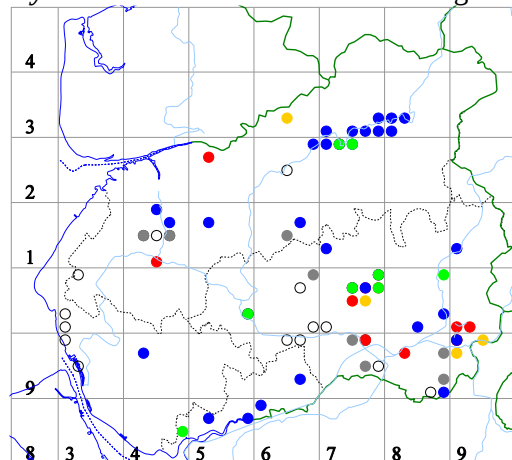


HYDROCHARITACEAE

Frogbit family

Hydrocharis morsus-ranae L. Frog-bit

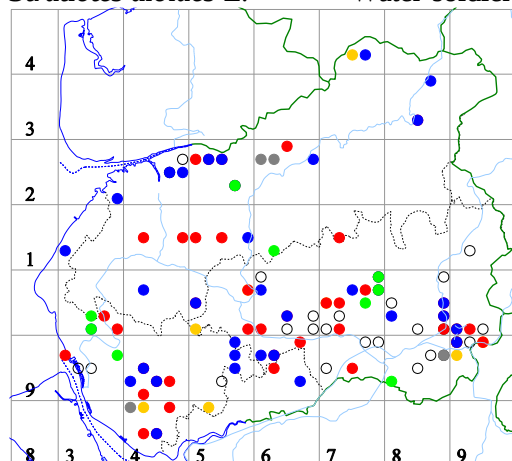


Status & distribution: Native, **Nationally Uncommon, Vulnerable (Red List for England)**; Axiophyte; widespread, now locally abundant and increasing along the Leeds & Liverpool Canal between Blackburn and Burnley; also, locally abundant with Water Soldier in the Bolton & Bury Canal.

Habitat: Canals, ponds and ditches.

Comments: Introduced at some locations and can be confused with plants of *Nymphoides peltata* that are in the early vegetative state.

Stratiotes aloides L. Water-soldier



Queen's Park, Blackburn DP Earl 2009

Status & distribution: Naturalised in South Lancashire; localised but sometimes occurring in abundance as for example along the Bolton & Bury Canal near Radcliffe which is choked with this species for about 1km; also recorded in abundance along the Rochdale Canal in north Manchester.

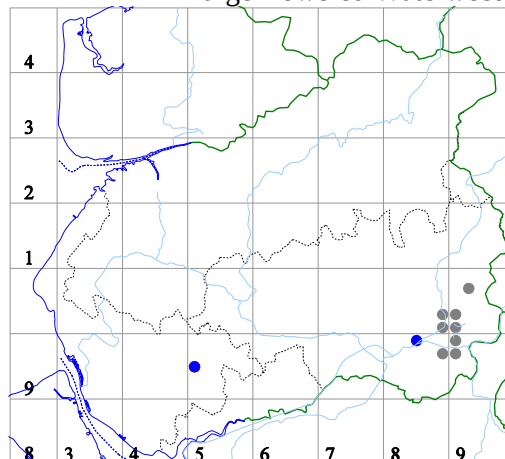
Earliest record traced: In pits near Longsight (SJ89T, Rev W Thompson 1792, BACUP).

Habitat: Canals and ponds.

Comments: Populations of this species declined sharply along the once disused Rochdale Canal following restoration.

Egeria densa Planchon

Large-flowered Waterweed



Status & distribution: Neophyte-naturalised; still occurred in the Sankey Canal, St. Helens (SJ5195, DP & J Earl & SP Toone, 2003) where known since 1976 (Liverpool Botanical Society, LIV) and the Rochdale Canal, Manchester (SJ8598 & SJ8599, Manchester Field Club, 2005); formerly more widespread in the Manchester canals and found at Bee Mill Lodge, Royton (SD90I, A Newton, 1963).

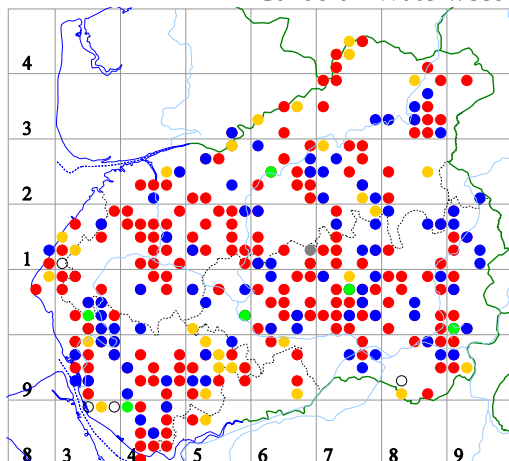
Earliest record traced: Ashton Canal, Droylsden (SJ89Y, Miss LW Frost, 1953, BM det. JE Dandy).

Habitat: Canals, especially where water was warmed from mill activities.

Comments: Native to South America. Introduced by the disposal of aquarium waste or deliberate cultivated in the once warm canal waters.

***Elodea canadensis* Michaux**

Canadian Waterweed



Status & distribution: Neophyte-naturalised; widespread but probably grossly over-recorded.

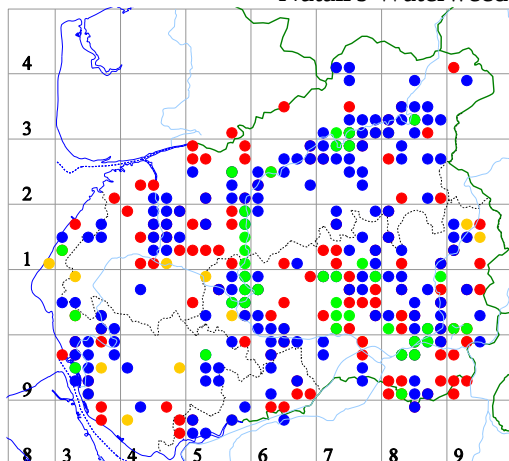
Earliest record traced: Manchester (Grindon 1859).

Habitat: Ponds, canals, ditches, reservoirs and mill lodges.

Comments: Native to North America. This species appears to have declined with the spread of *E. nuttallii*. A proportion of the records for *E. canadensis* will be misidentifications of *E. nuttallii*.

***Elodea nuttallii* (Planchon) H. St. John**

Nuttall's Waterweed



Cuerden Valley Country Park DP Earl 2020

Status & distribution: Neophyte-naturalised, widespread and rapidly increasing and often in great abundance along the canal systems.

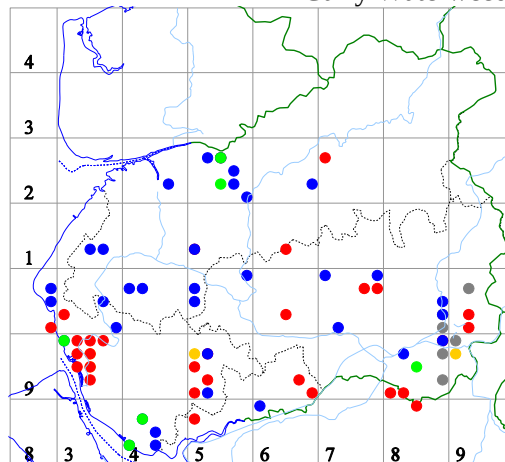
Earliest record traced: Hollingworth Lake (SD91H, JPC Harding, 1978, det., DA Simpson) but plants would almost certainly have been established in the vice-county prior to that date.

Habitat: Ponds, canals, ditches, reservoirs and mill lodges.

Comments: Native to North America. Not recorded in Travis's Flora although now more common than *E. canadensis*.

***Lagarosiphon major* (Ridley) Moss**

Curly Waterweed



Shirdley Hill DP Earl 2009

Status & distribution: Neophyte-naturalised; frequent to locally common along the Manchester canals and the Leeds & Liverpool Canal to the north of Liverpool; occasional elsewhere.

Earliest record traced: Known to be established in the canals near Droylsden (SD90, LN Kidd, c. 1950).

Habitat: Canals and ponds.

Comments: Neophyte, native to South Africa.

***Vallisneria spiralis* L.** Tapegrass

Status & former distribution: Neophyte-naturalised; Reddish Canal opposite Broadstone Mill (SJ89W, JE McDonald, 1906 & JE Lousley, 1947); Droylsden Canal (SJ99E, T Badderley, 1940 & JE Lousley, 1953, RGN); near Howe Bridge Colliery (SD60L, BW Fox, 1956).

Habitat: Warmed canal waters.

Comments: The native range extends from southern Europe and Tropical Africa through Asia to Australia. It is pointed out in Travis's manuscripts that the water of the canal by Broadstone Mill could reach as high as 38 degrees centigrade and that *Vallisneria* could survive in waters as warm as 29 degrees centigrade.

***Najas graminea* Delile**

Rice-field Water-nymph



Naias graminea, Del., var. *Delilei*, Magnus. With *Chara Braunii*, Gmel., in the tepid water of the Canal at Reddish, near Manchester, 9th Sept., 1885. Collected for Magnier's "Flora selecta exsiccata," and the few specimens sent are intended for our new members, and to show that this plant still maintains its station. It is, however, much more limited in quantity than when first discovered in 1883, and only about half the stature of specimens which I have previously distributed through the Club. Whether this is due to increased canal traffic, or to frequent collection by botanists, I could not determine.
CHARLES BAILEY.

Status & former distribution: Neophyte-naturalised; Reddish Canal (SJ89W, J Lee, 1883, MANCH) with numerous specimens circulated to collectors. Last seen by Broadstone Mill, Reddish (SJ89W, 1947).

Habitat: Warmed canal waters.

Comments: Native to the Tropics. A thermophilous plant that once survived in canal water warmed by the canal-side mills until the hot water supply was discontinued in 1947. C Bailey suggested plants were introduced with Egyptian cotton (*Journal of Botany* 1884 pp. 305-333).