



# Draft Wetland Plant ID Guide

## PondNet

# DRAFT

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DRAFT

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## Key to Groups

- Lvs submerged, or whorled
    - ◆ Lvs in basal rosette (fragments may be washed up on shoreline) ..... **A**
    - ◆ Lvs not in basal rosette (rarely emergent)
      - Lvs whorled or pseudowhorled (spiralling around stem) ..... **B**
      - Lvs opp ..... **C**
      - Lvs alt
        - Lvs simple and unlobed (may be entire or toothed)
          - Lvs with pinnate veins, large and crumpled like lettuce leaf ..... **D**
          - Lvs with parallel veins
            - Lvs with spiral fibres visible on tearing, 3-5 equal parallel veins. Sea water ..... **E**
            - Lvs without spiral fibres on tearing, 1-11 unequal parallel veins. Freshwater or brackish
              - Lvs <6mm wide ..... **F**
              - Lvs >6mm wide ..... **G**
          - Lvs compound (1-pinnate etc) or lobed
            - Lvs with translucent bladders (for trapping micro-fauna) ..... **H**
            - Lvs without translucent bladders ..... **I**
- Lvs floating on surface (rarely emergent). If ligule present [a grass] go to Group **P**
  - ◆ Lvs <10mm diam ..... **J**
  - ◆ Lvs >10mm diam
    - Lf veins pinnate (or obscure); lvs usu broadly oval to orbicular ..... **K**
    - Lf veins parallel
      - Lvs elliptic-lanc, with veins usu translucent ..... **L**
      - Lvs linear, long, with veins always opaque ..... **M**
- Lvs (or stem only) emergent, never whorled
  - ◆ Lvs absent (stems only) ..... **N**
  - ◆ Lvs present
    - Lvs Iris-like (equitant) ..... **O**
    - Lvs not Iris-like
      - Lf veins parallel
        - Lf sheath with ligule or ring of hairs (grasses) ..... **P**
        - Lf sheath without ligule or ring of hairs ..... **Q**
      - Lf veins pinnate
        - Lvs simple
          - Lvs entire ..... **R**
          - Lvs toothed or lobed ..... **S**
        - Lvs 1-pinnate ..... **T**
        - Lvs 2-pinnate ..... **U**

**Group A** – Lvs in basal rosettes (fragments may be washed up on shore line)

■ Lvs fully opaque with cellular aerenchyma structure

◆ Lvs aloe-like, sharply toothed; rosettes usu not rooted ..... *Water-soldier* **Stratiotes aloides**

◆ Lvs not aloe-like or sharply toothed; rosettes usu rooted

Lvs with 4 large hollows and cross-veins, ± cylindrical

Lvs stiff, brittle (audible snap), hollows ± equal ..... *Quillwort* **Isoetes lacustris**

Lvs flaccid, straight, hollows unequal ..... *Spring Quillwort* **Isoetes echinospora**

Lvs with 2 large hollows (double-barrelled), cross-veins absent, sparse latex present. Upland lakes

..... *Water Lobelia* **Lobelia dortmanna**

Lvs solid or with indistinct hollows

Lvs with cross-veins (HTL, occ indistinct); auricles present, 1mm, overlapping; plant bulbous at base

Lvs with 2-4 indistinct hollows in TS, 0.5-1.5mm diam; plant often reddish *Bulbous Rush* **Juncus bulbosus**

Lvs without cross-veins

Lvs with few long hairs at extreme base, 2-3mm diam, spongy aerenchyma, sheathing at base

..... *Shoreweed* **Littorella uniflora**

Lvs hairless, tapering to acute point, 1-1.5mm diam at base, solid, not sheathing. Mtn lakes

..... *Awlwort* **Subularia aquatica**

■ Lvs translucent without aerenchyma block (cell) structure, cross-veins present, brittle and crunchy, like spider-plant

◆ Lvs with latex, no odour ..... *Water-plantain* **Alisma plantago-aquatica**

◆ Lvs without latex

Lvs with strong odour; stolons usu absent ..... *Lesser Water-plantain* **Baldellia ranunculoides**

Lvs without odour

Plant with stolons, looking like spider-plant ..... *Floating Water-plantain* **Luronium natans**

Plant without stolons. W Scot, Ire ..... *Pipewort* **Eriocaulon aquaticum**

**Group B** – lvs whorled or pseudowhorled (spiralling around stem)

■ Lvs simple

◆ Lvs pseudowhorled, in spiral of 3-4 around stem

Lvs minutely toothed, strongly recurved.....*Curly Waterweed* **Lagarosiphon major**

◆ Lvs 3(4) whorled

Lvs entire except nr apex

Lvs minutely toothed nr acute apex, strongly recurved, often twisted, 1-1.5mm wide at base

..... *Nuttall's Waterweed* **Elodea nutallii**

Lvs minutely toothed nr ± obtuse apex, never strongly recurved, 2.5-3mm wide at base

..... *Canadian Waterweed* **Elodea canadensis**

Lvs toothed all along length

Lvs minutely toothed, 1mm wide; stem smooth. Lakes, N from Lancs. Sch8 ..... *Slender Naiad* **Najas flexilis**

Lvs deeply spiny toothed, 1.5mm wide; stems spiny. Norfolk Broads. Sch8 *Holly-leaved Naiad* **Najas marina**

◆ Lvs usu 4-5 whorled

Lvs in whorls of 4, crowded, entire to minutely toothed, 5mm wide. R alien

..... *Large-flowered Waterweed* **Egeria densa**

Lvs in whorls of 4-6, not crowded, finely toothed, 2(5)mm wide, brown fringed scales present above nr base. VR,

Scot, Ire ..... *Esthwaite Waterweed* **Hydrilla verticillata**

◆ Lvs in whorls of 6-11; stem round, often above water.....*Mare's-tail* **Hippuris vulgaris**

■ Lvs lobed or compound

◆ Lvs usu 4-6 whorled; lfts (segments) thread-like, entire, no apical bristles

Lvs usu 4-whorled

Lvs with 6-12 lobes per side, flaccid out of water; stems 0.8-1.2mm diam

..... *Alternate Water-milfoil* **Myriophyllum alterniflorum**

Lvs with 16-18 lobes per side, ± rigid out of water, often encrusted in marl. Usu eutrophic or base-rich water;

stems 1.5-3mm diam..... *Spiked Water-milfoil* **Myriophyllum spicatum**

Lvs usu 5-whorled, 12-16 lobes per side. Usu base-rich water *Whorled Water-milfoil* **Myriophyllum verticillatum**

Lvs (4)5-6 whorled, 4-15 lobes per side, pale blue-green, covered in sessile glands. Usu eutrophic water

..... *Parrot's-feather* **Myriophyllum aquaticum**

◆ Lvs >7 whorled, forked (at least once), minutely toothed at least nr apex, with apical bristles

Lvs 1(2)-forked, rigid, terminal lvs occ much thicker..... *Rigid Hornwort* **Ceratophyllum demersum**

Lvs 3-forked, flaccid. Usu brackish water or as ornamental ..... *Soft Hornwort* **Ceratophyllum submersum**

**Group C - Lvs opp**

■ Lvs simple

◆ Lf margin entire

Lvs translucent

Lvs 0.3-2mm wide, tapering to v fine minutely mucronate apex, wide central darker green band

.....*Horned Pondweed Zannichellia palustris*

Lvs usu opaque

Lvs succulent, apex acute; petioles joined around stem; stem round with dark ring below node (often slightly constricted).....*New Zealand Pigmyweed Crassula helmsii*

Lvs not succulent, apex usu notched; petioles joined around stem.....*Water-starwort Callitriche spp*

◆ Lf margin toothed

Lvs flaccid, minutely toothed, translucent midrib and 1(3) lateral veins per side, sessile, clasping

.....*Opposite-leaved Pondweed Groelandia densa*

Lvs rigid, spiny, brittle, all veins obscure. Norfolk Broads. Sch8 ..... *Holly-leaved Naiad Najas marina*

■ Lvs forked, petiolate, repeatedly forked, ciliate or stiffly hairy on margins *Carolina Water-shield Cabomba caroliniana*

**Group D – Lvs with pinnate veins, crumpled**

■ Lvs large, fan-shaped, crumpled, shiny, like semi-translucent lettuce (submerged lvs) *Yellow Water-lily Nuphar lutea*

**Group E – Lvs with spiral fibres on tearing, 3-5 equal parallel veins. Sea water**

■ Lvs dark green, translucent, cross-veins present (often subopp), spiral fibres on tearing. All spp with short lvs in winter

◆ Lvs usu 5-10mm wide, usu 5-veins; lf sheaths closed ..... *Eelgrass Zostera marina*

◆ Lvs usu 1.5-2.5mm wide, 3 main veins; lf sheaths closed ..... *Narrow-leaved Eelgrass Zostera angustifolia*

◆ Lvs usu <1mm wide, 3 main veins; lf sheaths open ..... *Dwarf Eelgrass Zostera noltei*

**Group F – Lvs <6mm wide**

■ Lvs opaque, channelled

- ◆ Lvs 0.5-1mm wide, thread-like, ± flat, channelled above, veins 3-4, with 2 hollows or solid, sheathing base; stem 1mm diam, ± round..... *Floating Club-rush* **Eleogiton fluitans**

■ Lvs translucent, not channelled, dark green, thin

◆ Stem round or v slightly compressed

- Lf minutely toothed nr apex, 2 air hollows in TS (not easily seen but try x20) . Brackish or saline water  
..... *Tasselweed* **Ruppia spp**

Lf always entire

Lf attached to a loose sheath with a free ligule (3-15mm), usu with 2 air hollows (occ hard to see), 0.5-1mm wide, thread-like apex always entire. Brackish or freshwater

Lf sheath open and overlapping ..... *Fennel Pondweed* **Potamogeton pectinatus**

Lf sheath closed when young. N. Britain ..... *Slender-leaved Pondweed* **Potamogeton filiformis**

Lf attached directly to stem (no loose sheath), 0.5-1mm wide, tread-like

Lvs stiff, not adhering together when removed from water, <0.5mm wide

..... *Hair-like Pondweed* **Potamogeton trichoides**

Lvs limp, adhering together when removed from water, 1-2mm wide

Stipules open and overlapping; nodal glands usu present ..... *Small Pondweed* **Potamogeton berchtoldii**

Stipules closed when young; nodal glands usu absent ..... *Lesser Pondweed* **Potamogeton pusillus**

◆ Stem flattened

Lvs ≤2mm wide

Lf v acute, 1 lateral vein either side of midrib ..... *Sharp-leaved Pondweed* **Potamogeton acutifolius**

Lf obtuse, 2 lateral veins either side of midrib ..... *Grass-wrack Pondweed* **Potamogeton compressus**

Lvs 2-4mm wide

Lf apex acute, often mucronate, 2 lateral veins per side..... *Flat-stalked Pondweed* **Potamogeton friesii**

Lf apex obtuse, not or scarcely mucronate, usu 1 lateral vein per side

..... *Blunt-leaved Pondweed* **Potamogeton obtusifolius**

## Group G – Lvs >6mm wide

### ■ Lvs all sessile, v thin, translucent, crispy when dry

◆ Lvs strongly clasping with auricles, margin minutely toothed..... *Perfoliate Pondweed* **Potamogeton perfoliatus**

◆ Lvs weakly clasping or rounded at base, margin minutely toothed and crisped

..... *Curled Pondweed* **Potamogeton crispus**

◆ Lvs rounded (at base), margin entire, not strongly wavy..... *Long-stalked Pondweed* **Potamogeton praelongus**

◆ Lvs tapered at base

Lf margin entire

Lf margin minutely toothed (at least when young); hybrid of *P. lucens* x *perfoliatus* .... **Potamogeton x salicifolius**

### ■ Lvs mostly sessile but uppermost shortly stalked

◆ Lvs tapered at base, margin minutely toothed..... *Various-leaved Pondweed* **Potamogeton gramineus**

### ■ Lvs all shortly stalked (usu 5-15mm)

◆ Lvs with minutely toothed margin, and tapering at base ..... *Shining Pondweed* **Potamogeton lucens**

◆ Lvs with entire margin

Lvs usu with protruding midrib; hybrid of *P. lucens* x *natans*..... **Potamogeton x fluitans**

Lvs without protruding midrib. Calc fens ..... *Fen Pondweed* **Potamogeton coloratus**

## Group H – Lvs with translucent bladders. **NB** Lvs irregularly divided with tiny apical bristles

### ■ Finely dissected lvs and bladders on same stem; lvs pinnately divided

◆ Lf segments with >2 bristles on teeth. Base-rich water..... *Greater Bladderwort* **Utricularia vulgaris**

◆ Lf segments with 1-2 bristles on teeth. Acid water ..... *Bladderwort* **Utricularia australis**

### ■ Finely dissected lvs and bladders mostly on separate stems; lvs palmately divided

◆ Lf segments minutely toothed, with 1-2 bristles on teeth ..... **Utricularia intermedia**

◆ Lf segments entire, with 1 terminal bristle ..... *Lesser Bladderwort* **Utricularia minor**

## Group I – Lvs without translucent bladders

### ■ Lvs 1-pinnate, flat; petioles without sheathing base..... *Water-violet* **Hottonia palustris**

### ■ Lvs 2-3(6) pinnate; petioles with sheathing base

◆ Lfts with 1-3(4) apical bristles, usu divided into 3's, thread-like

Lfts round, bristle-like, acute; petiole with sheathing base; plant without smell [suborbicular floating lvs may be present]..... *Water-crowfoot* **Ranunculus aquatilis agg**

◆ Lfts without apical bristle(s), usu divided into 2's (forked)

Lfts round or flat, occ bristle-like, but without apical bristles, usu divided into 2's; petiole with sheathing base ± swollen; plant with sweet celery smell when crushed..... *Lesser Marshwort* **Apium inundatum**

Lfts flat, obtuse, broad (not bristle-like), deeply lobed; petiole sheathing at base; plant with sweet celery smell when crushed. Fast-flowing calc rivers ..... *River Water-dropwort* **Oenanthe fluviatilis**



**Group J – Lvs <10mm diam**

■Roots absent

- ◆Lvs (thalli) <1mm diam, nearly spherical, veins absent; plant floating on or nr surface

..... *Rootless Duckweed Wolffia arrhiza*

■Roots single

- ◆Lvs (thalli) to 7mm diam, not translucent

Lvs overlapping in 2-ranks

Lvs with few short unicellular hairs both sides; plant often growing in large masses, blue-green turning red late summer..... *Water Fern Azolla filiculoides*

Lvs not overlapping in 2-ranks

Lvs swollen below, usu 4-5 veins originating from same point at base, convex above with obscure reticulations, 3-5mm diam ..... *Fat Duckweed Lemna gibba*

Lvs thin and ± flat

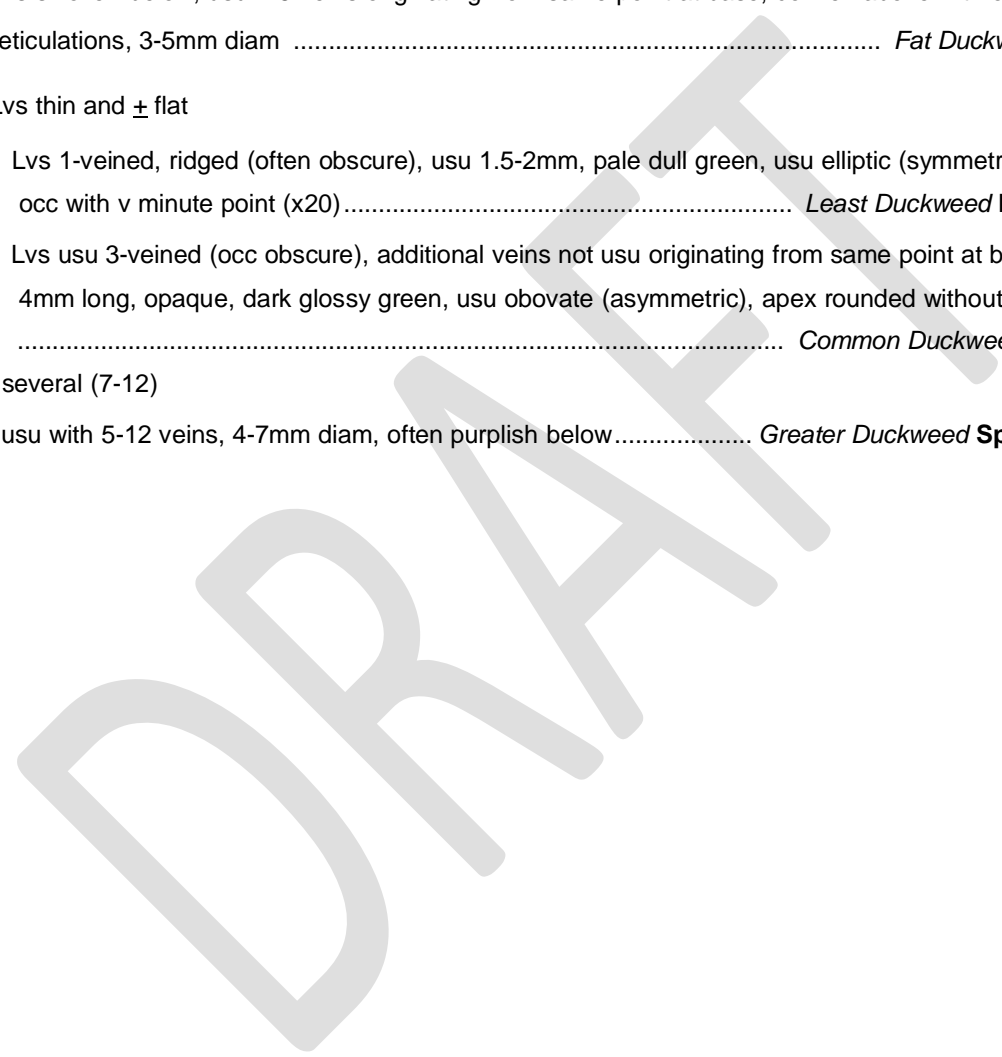
Lvs 1-veined, ridged (often obscure), usu 1.5-2mm, pale dull green, usu elliptic (symmetric), obtuse and occ with v minute point (x20)..... *Least Duckweed Lemna minuta*

Lvs usu 3-veined (occ obscure), additional veins not usu originating from same point at base, usu 3-4mm long, opaque, dark glossy green, usu obovate (asymmetric), apex rounded without a point

..... *Common Duckweed Lemna minor*

■Roots several (7-12)

- ◆Lvs usu with 5-12 veins, 4-7mm diam, often purplish below..... *Greater Duckweed Spirodela polyrhiza*



**Group K** – Lf veins pinnate (or obscure); lvs usu broadly oval to orbicular

■ Floating lvs palmately lobed (finely dissected submerged lvs often present)

◆ Lvs alt, with 1-3(4) apical bristles..... *Water-crowfoot* **Ranunculus aquatilis** agg

■ Floating lvs entire

◆ Lvs with pinnate veins herringbone-like and forked, margin flat

Lvs 12-40 x 8-30cm, with 23-28 lateral veins, midrib occ hairy below ..... *Yellow Water-lily* **Nuphar lutea**

Lvs 4-14 x 3.5-13cm, with lateral veins  $\pm$  obscure or indistinct. R, Highland lakes *Least Water-lily* **Nuphar pumila**

◆ Lvs with palmate veins mostly radiating from where the blade joins the petiole

Lvs with tubercles below (purplish when old), margin slightly scalloped *Fringed Water-lily* **Nymphoides peltata**

Lvs without tubercles, margin flat..... *White Water-lily* **Nymphaea alba**

◆ Lvs with veins  $\pm$  parallel and converging at apex

Latex present in petiole; lvs usu arrow-shaped..... *Arrowhead* **Sagittaria sagittifolia**

Lvs absent in petiole

Lvs with bowed parallel-veins only, with a pore-like terminal hydathode visible below; petiole sheathing at

base. Sch8 ..... *Starfruit* **Damasonium**

*alisma* Lvs with bowed parallel-veins with 'pinnate-laddering' at  $\pm 90^\circ$  to midrib

Stipules present ..... *Frogbit* **Hydrocharis morsus-ranae**

Stipules absent. Mostly Montgomery-Manchester region. Sch8..... *Floating Water-plantain* **Luronium natans**

◆ Lvs with veins forming closed loops (anastomosing), rough with adpressed hairs above

..... (floating lvs) *Amphibious Bistort* **Persicaria amphibia**

**Group L** - Lvs elliptic-lanc, with veins usu translucent

■ Petioles jointed below blade (discoloured flexible joint); lf veins usu translucent

..... *Broad-leaved Pondweed* **Potamogeton natans**

■ Petiole not jointed, without discoloured junction

◆ Lf veins  $\pm$  opaque. Bogs (usu acid) ..... *Bog Pondweed* **Potamogeton polygonifolius**

◆ Lf veins v translucent. Calc eutrophic rivers ..... *Loddon Pondweed* **Potamogeton nodosus**

**Group M** – Lvs linear, long, with veins opaque

■ Lvs with latex..... *Arrowhead* **Sagittaria sagittifolia**

■ Lvs without latex

◆ Lvs rounded at apex

Lvs long (>20cm), not curved towards apex ..... *Branched Bur-reed* **Sparganium erectum**

Lvs short (<20cm), curved towards apex ..... *Least Bur-reed* **Sparganium natans**

◆ Lvs acute at apex ..... *Floating Water-plantain* **Luronium natans**

**Group N** – Lvs absent (stems only)

■ Stem smooth, round, pith spongy

◆ Stems >6mm diam

Stems green. Freshwater ..... *Common Club-rush* **Schoenoplectus lacustris**

Stems glaucous-grey. Brackish or freshwater ..... *Grey Club-rush* **Schoenoplectus tabernaemontani**

◆ Stems <6mm diam

Basal sheaths reddish to dark-red brown to black (darkening towards base)..... *Soft Rush* **Juncus effusus**

■ Stem ridged or grooved, at least to touch

◆ Stems with continuous pith, 3–5mm diam, green; sheaths red-brown to olive

..... *Compact Rush* **Juncus conglomeratus**

◆ Stems with interrupted pith, <2.5mm diam, glaucous; basal sheaths blackish-purple *Hard Rush* **Juncus inflexus**

**Group O** – Lvs Iris-like (equitant)

■ Lvs glaucous, 15-50mm wide, odourless, margins not wrinkled..... *Yellow Iris* **Iris pseudoacorus**

■ Lvs green, 10-25mm wide, with sweet citrus smell, margins wrinkled..... *Sweet-flag* **Acorus calamus**

**Group P** - Lf sheath with ligule or ring of hairs

■ Ligule a ring of hairs..... *Common Reed* **Phragmites australis**

■ Ligule a membrane (typical)

◆ Lvs with obvious cross-veins (NB *Glyceria* cannot normally be separated vegetatively!!)

Lvs usu 10-14mm wide, emergent, not floating; ligule shorter than broad, cuspidate

..... *Reed Sweet-grass* **Glyceria maxima**

Lvs usu <10mm wide, floating or occ emergent; ligules longer than broad, never cuspidate

Ligule often rounded..... *Plicate Sweet-grass* **Glyceria notata**

Ligule long acute

Lvs glaucous grey-green..... *Small Sweet-grass* **Glyceria declinata**

Lvs green, not glaucous grey-green

Spikelets disarticulating ..... *Floating sweet-grass* **Glyceria fluitans**

Spikelets not disarticulating ..... *Hybrid Sweet-grass* **Glyceria x pedicellata**

◆ Lvs without obvious cross-veins

Lf sheaths closed; lvs folded in bud; ligule glabrous..... *Whorl-grass* **Catabrosa aquatica**

Lf sheaths open; lvs rolled in bud; ligule minutely hairy

Lvs broad, >5mm wide

Lvs narrow, <5mm wide

Lf sheaths with a bluish-white bloom..... *Marsh Foxtail* **Alopecurus geniculatus**

Lf sheaths green ..... *Creeping Bent* **Agrostis stolonifera**

**Group Q** – Lf sheath without ligule or ring of hairs

■ Latex present (often sparse)

- ◆ Lvs usu arrow-shaped; petiole with latex present throughout cross-section

Petiole ± sharply triangular, large air spaces in TS, green at blade join ..... *Arrowhead* **Sagittaria sagittifolia**

Petiole irregular shape, small air spaces in TS, purplish at blade join, purple-black spotting nr base

..... *Duck-potato* *Sagittaria latifolia*

- ◆ Lvs not arrow-shaped; petiole with latex confined to margin in cross-section

Lf blade distinct from petiole

Petioles ± round or channelled, occ large equal aerenchyma in cross-section

..... *Water-plantain* **Alisma plantago-aquatica**

Petiole irregular with large aerenchyma in cross-section .... *Narrow-leaved Water-plantain* *Alisma lanceolatum*

Lf blade not or hardly discernible from petiole; later lvs with a short (1.5-4cm) linear-lanc or narrowly oblong

blade, widest nr base. VR, Worcs. Sch8..... *Ribbon-leaved Water-plantain* *Alisma gramineum*

■ Latex absent

- ◆ Lvs flat along entire length

Lvs lanc-shaped, <2cm wide, 3 main veins, strong odour..... *Lesser Water-plantain* *Baldellia ranunculoides*

Lvs heart-shaped, >5cm wide, >20 main veins, odourless..... *Pickereelweed* **Pontedaria cordata**

- ◆ Lvs triangular nr base only

Lvs 10-25mm wide ..... *Branched Bur-reed* **Sparganium erectum**

Lvs 3-12mm wide..... *Unbranched Bur-reed* **Sparganium emersum**

- ◆ Lvs triangular above midpoint (becoming flat nr tip), 4-15mm wide, spiral fibres present when torn

..... *Flowering-rush* **Butomus umbellatus**

- ◆ Lvs semi-cylindrical, flat and rounded at tip

Lvs 4-6mm wide..... *Lesser Bulrush* **Typha angustifolia**

Lvs 12-18mm wide ..... *Bulrush* **Typha latifolia**

**Group R** – Lvs entire

■ Lvs alt

- ◆ Lvs with single hydathode below at apex; petioles not sheathing at base

Stems with spreading hairs ..... *Water Forget-me-not* **Myosotis scorpioides**

Stem with adpressed hairs ..... *Tufted Forget-me-not* **Myosotis laxa**

- ◆ Lvs with hydathodes sunken along margins (best viewed end-on); petioles sheathing at base

Lf blade >7cm ..... *Greater Spearwort* **Ranunculus lingua**

Lf blade <7cm ..... *Lesser Spearwort* **Ranunculus flammula**

- Lvs opp or 3-whorled, with orange dots both sides..... *Yellow Loosestrife* **Lysimachia vulgaris**

**Group S** – Lvs toothed or lobed

■Lvs opp

◆Lvs mint-scented, with sessile glands when v young; stem square ..... *Water Mint* **Mentha aquatica**

◆Lvs not mint-scented; stem round or ± so (never square)

Stem aromatic when broken.....*Bur-marigold* **Bidens spp**

Stem not aromatic when broken

Lvs stalked at least below (**NB** Hybrid Water-speedwell *Veronica x lackschewitzii* is intermediate between *V. anagallis-aquatica* and *V. catenata* – probably the most commonly taxon encountered!!)

Stem round..... *Brooklime* **Veronica beccabunga**

Stem angled.....*Blue Water-speedwell* **Veronica anagallis-aquatica**

Lvs all sessile, ± clasping

Stem round, often minutely hairy.....*Marsh Speedwell* **Veronica scutellata**

Stem angled, glabrous or hairy at base only.....*Pink Water-speedwell* **Veronica catenata**

■Lvs alt

◆Lvs with hydathodes sunken along margins (best viewed end-on); petiole sheathing at base

Lf blade >7cm..... *Greater Spearwort* **Ranunculus lingua**

Lf blade <7cm.....*Lesser Spearwort* **Ranunculus flammula**

**Group T** – Lvs 1-pinnate

■Petiole solid, 3 vb's, channelled..... *Water-cress* **Rorippa nasturtium-aquaticum agg**

■Petiole hollow

◆Petiole with ring-mark

Petiole with celery smell; lflets without cartilaginous margin and teeth..... *Lesser Water-parsnip* **Berula erecta**

Petiole with petrol smell; lflets with cartilaginous margin and teeth. R..... *Greater Water-parsnip* **Sium latifolium**

◆Petiole without ring-mark, weak sweet celery smell

Lflets linear, deeply lobed or entire (not toothed); petiole with v sparse latex

.....*Tubular Water-dropwort* **Oenanthe fistulosa**

Lflets toothed, never deeply lobed; petiole never with latex..... *Fool's-water-cress* **Apium nodiflorum**

**Group U** – Lvs 2-pinnate

■Latex present and drying orange-brown; petiole (and lvs) with acrid unpleasant smell

..... *Hemlock Water-dropwort* **Oenanthe crocata**

■Latex v sparse or absent, not drying orange-brown; petiole (and lvs) with strong parsley smell

..... *Fine-leaved Water-dropwort* **Oenanthe aquatica**