

Your Name	<input style="width: 90%;" type="text"/>	Date	<input style="width: 90%;" type="text"/>	Pond name (if known)	<input style="width: 90%;" type="text"/>
Square: 4 fig grid reference e.g. SP1243	<input style="width: 90%;" type="text"/>	Pond: 8 fig grid ref e.g. SP 1235 4325	<input style="width: 90%;" type="text"/>	Voucher material (optional)	<input style="width: 90%;" type="text"/>
Determiner name (optional)	<input style="width: 90%;" type="text"/>				

**METHOD** (complete one survey form per pond) **Aim:** To assess pond quality and conservation value, by recording wetland plants.

**How:** Identify the outer boundary of the pond. This is the 'line' marking the pond's highest yearly water levels (*usually in early spring*). It will probably *not* be the current water level of the pond, but should be evident from wetland vegetation like rushes at the pond's outer edge, or other clues such as water-line marks on tree trunks or stones. Within the outer boundary, search all the dry and shallow areas of the pond that are accessible. Survey deeper areas with a net or grapnel hook.

Record wetland plants found by crossing through the names on this sheet. You don't need to record terrestrial species. For each species record its *approximate* abundance as a percentage of the pond's surface area. Where few plants are present, record as '<1%'. If you are not completely confident in your species identification put '?' by the species name. If you are really unsure put '??'.

**Enter the results online:** [www.freshwaterhabitats.org.uk/projects/waternet/](http://www.freshwaterhabitats.org.uk/projects/waternet/) or send your results to Freshwater Habitats Trust.

### Aquatic plants (submerged-leaved species)

Arrowhead (*Sagittaria sagittifolia*)  
 Arrowhead, Canadian (*Sagittaria rigida*)  
 Arrowhead, Narrow-leaved (*Sagittaria subulata*)  
 Axlwort (*Subularia aquatica*)  
 Bladderwort (*Utricularia australis*)  
 Bladderwort grp, Greater (*Utricularia vulgaris* (s.l.))  
 Bladderwort grp, Intermed. (*U. intermedia* (s.l.))  
 Bladderwort, Greater (*Utricularia vulgaris* (s.s.))  
 Bladderwort, Intermed. (*U. intermedia* (s.s.))  
 Bladderwort, Lesser (*Utricularia minor*)  
 Bladderwort, Nordic (*Utricularia stygia*)  
 Bladderwort, Pale (*Utricularia ochroleuca*)  
 Bur-reed, Floating (*Sparganium angustifolium*)  
 Bur-reed, Least (*Sparganium natans*)  
 Bur-reed, Unbranched (*Sparganium emersum*)  
 Cape-pondweed (*Aponogeton distachyos*)  
 Club-rush, Floating (*Eleogiton fluitans*)  
 Duck-potato (*Sagittaria latifolia*)  
 Fanwort (*Cabomba caroliniana*)  
 Hampshire-purslane (*Ludwigia palustris*)  
 Hornwort, Rigid (*Ceratophyllum demersum*)  
 Hornwort, Soft (*Ceratophyllum submersum*)  
 Lobelia, Water (*Lobelia dortmanna*)  
 Mare's-tail (*Hippuris vulgaris*)  
 Marshwort, Lesser (*Apium inundatum*)  
 Moss, Bog (list species if possible) (*Sphagnum* sp.)  
 Moss, Willow (*Fontinalis antipyretica*)  
 Naiad, Holly-leaved (*Najas marina*)  
 Naiad, Slender (*Najas flexilis*)  
 Parrot's-feather (*Myriophyllum aquaticum*)  
 Pigmyweed, New Zealand (*Crassula helmsii*)  
 Pipewort (*Eriocaulon aquaticum*)  
 Pondweed species undt. (*Potamogeton* sp.)  
 Pondweed, American (*Potamogeton epihydrus*)  
 Pondweed, Blunt-leaved (*Potamogeton obtusifolius*)  
 Pondweed, Curled (*Potamogeton crispus*)  
 Pondweed, Fen (*Potamogeton coloratus*)  
 Pondweed, Fennel (*Potamogeton pectinatus*)  
 Pondweed, Flat-stalked (*Potamogeton friesii*)  
 Pondweed, Grass-wrack (*P. compressus*)  
 Pondweed, Hairlike (*Potamogeton trichoides*)  
 Pondweed, Horned (*Zannichellia palustris*)  
 Pondweed, Lesser (*Potamogeton pusillus*)  
 Pondweed, Loddon (*Potamogeton nodosus*)  
 Pondweed, Long-stalked (*Potamogeton praelongus*)  
 Pondweed, Opp-leaved (*Groenlandia densa*)  
 Pondweed, Perfoliate (*Potamogeton perfoliatus*)  
 Pondweed, Red (*Potamogeton alpinus*)  
 Pondweed, Sharp-leaved (*Potamogeton acutifolius*)  
 Pondweed, Shetland (*Potamogeton rutilus*)  
 Pondweed, Shining (*Potamogeton lucens*)  
 Pondweed, Slender-leaved (*Potamogeton filiformis*)  
 Pondweed, Small (*Potamogeton bertholdii*)  
 Pondweed, Various-lvd. (*Potamogeton gramineus*)  
 Quillwort (*Isoetes lacustris*)  
 Quillwort, Spring (*Isoetes echinospora*)  
 Shoreweed (*Littorella uniflora*)  
 Stonewort, Bird's-nest (*Tolypella nidifica*)  
 Stonewort, Great Tassel (*Tolypella prolifera*)  
 Stonewort, Tassel (*Tolypella intricata*)  
 Stonewort species undt. (*Chara* sp.)  
 Stonewort, Baltic (*Chara baltica*)

Stonewort, Bearded (*Chara canescens*)  
 Stonewort, Bristly (*Chara hispida*)  
 Stonewort, Clustered (*Tolypella glomerata*)  
 Stonewort, Common (*Chara vulgaris*)  
 Stonewort, Convergent (*Chara connivens*)  
 Stonewort, Coral (*Chara tormentosa*)  
 Stonewort, Dark (*Nitella opaca*)  
 Stonewort, Delicate (*Chara virgata*)  
 Stonewort, Dwarf (*Nitella tenuissima*)  
 Stonewort, Few-branched (*Nitella spanioclema*)  
 Stonewort, Foxtail (*Lamprothamnium papulosum*)  
 Stonewort, Fragile (*Chara globularis*)  
 Stonewort, Hedgehog (*Chara pedunculata*)  
 Stonewort, Intermediate (*Chara intermedia*)  
 Stonewort, Least (*Nitella confervacea*)  
 Stonewort, Lesser Bearded (*Chara curta*)  
 Stonewort, Many-branched (*Nitella hyalina*)  
 Stonewort, Mossy (*Chara muscosa*)  
 Stonewort, Naked (*Chara denudata*)  
 Stonewort, Opposite Stonewort (*Chara contraria*)  
 Stonewort, Pointed (*Nitella mucronata*)  
 Stonewort, Rough (*Chara aspera*)  
 Stonewort, Rugged (*Chara rudis*)  
 Stonewort, Slender (*Nitella gracilis*)  
 Stonewort, Slimy-fruited (*Nitella capillaris*)  
 Stonewort, Smooth (*Nitella flexilis*)  
 Stonewort, Starry (*Nitellopsis obtusa*)  
 Stonewort, Strawberry (*Chara fragifera*)  
 Stonewort, Translucent (*Nitella translucens*)  
 Tapegrass (*Vallisneria spiralis*)  
 Water-crowfoot species undt. (*Ranunculus* sp.)  
 Water-crowfoot, Brackish (*Ranunculus baudotii*)  
 Water-crowfoot, Common (*Ranunculus aquatilis*)  
 Water-crowfoot, Fan-leaved (*Ranunculus circinatus*)  
 Water-crowfoot, Pond (*Ranunculus peltatus*)  
 Water-crowfoot, River (*Ranunculus fluitans*)  
 Water-crowfoot, Stream (*Ranunculus penicillatus*)  
 Water-crowfoot (*R. penicillatus* spp. *penicillatus*)  
 Water-crowfoot, Thread-lvd. (*R. trichophyllum*)  
 Water-crowfoot, Three-lobed (*R. tripartitus*)  
 Water-dropwort, River (*Oenanthe fluviatilis*)  
 Water-milfoil, Alternate (*Myriophyllum alterniflorum*)  
 Water-milfoil, Spiked (*Myriophyllum spicatum*)  
 Water-milfoil, Whorled (*Myriophyllum verticillatum*)  
 Water-soldier (*Stratiotes aloides*)  
 Water-starwort species undt. (*Callitriche* sp.)  
 Water-starwort, Autumnal (*C. hermaphroditica*)  
 Water-starwort, Blunt-fruited (*C. obtusangula*)  
 Water-starwort, Common (*Callitriche stagnalis*)  
 Water-starwort, Intermediate (*Callitriche hamulata*)  
 Water-starwort, no English name (*C. palustris*)  
 Water-starwort, Short-leaved (*Callitriche truncata*)  
 Water-starwort, Various-lvd. (*Callitriche platycarpa*)  
 Water-violet (*Hottonia palustris*)  
 Waterweed, Canadian (*Elodea canadensis*)  
 Waterweed, Curly (*Lagarosiphon major*)  
 Waterweed, Esthwaite (*Hydrilla verticillata*)  
 Waterweed, Large-flowered (*Egeria densa*)  
 Waterweed, Nuttall's (*Elodea nuttallii*)  
 Waterweed, South American (*Elodea callitrichoides*)  
 Waterwort, Eight-stamened (*Elatine hydropiper*)  
 Waterwort, Six-stamened (*Elatine hexandra*)

### Floating-leaved species

Bistort, Amphibious (*Persicaria amphibia*)  
 Crystalwort, Channelled (*Riccia canaliculata*)  
 Crystalwort, Lizard (*Riccia bifurca*)  
 Duckweed, non-native sp. (*Lemna aequinoctialis*)  
 Duckweed, a non-native sp. (*Spirodela oligorrhiza*)  
 Duckweed, Common (*Lemna minor*)  
 Duckweed, Fat (*Lemna gibba*)  
 Duckweed, Greater (*Spirodela polyrhiza*)  
 Duckweed, Ivy-leaved (*Lemna trisulca*)  
 Duckweed, Least (*Lemna minuta*)  
 Duckweed, non-native sp. (*Lemna valdiviana*)  
 Duckweed, Red (*Lemna turionifera*)  
 Duckweed, Rootless (*Wolffia arrhiza*)  
 Frogbit (*Hydrocharis morsus-ranae*)  
 Liverwort, floating sp. (*Riccia fluitans*)  
 Liverwort, floating sp. (*Ricciocarpos natans*)  
 Pennywort, Floating (*Hydrocotyle ranunculoides*)  
 Pondweed, Bog (*Potamogeton polygonifolius*)  
 Pondweed, Broad-leaved (*Potamogeton natans*)  
 Spatter-dock (*Nuphar advena*)  
 Water Fern (*Azolla filiculoides*)  
 Water-lily, Fringed (*Nymphaoides peltata*)  
 Water-lily, Least (*Nuphar pumila*)  
 Water-lily, non-native sp. (*Nymphaeae* sp.)  
 Water-lily, White (*Nymphaea alba*)  
 Water-lily, Yellow (*Nuphar lutea*)  
 Water-plantain, Floating (*Luronium natans*)

### Emergent plant species

Angelica, Garden (*Angelica archangelica*)  
 Angelica, Wild (*Angelica sylvestris*)  
 Arrowgrass, Marsh (*Triglochin palustre*)  
 Arum, Bog (*Calla palustris*)  
 Asphodel, Bog (*Narthecium ossifragum*)  
 Asphodel, Scottish (*Tofieldia pusilla*)  
 Avens, Water (*Geum rivale*)  
 Balsam, Indian (*Impatiens glandulifera*)  
 Balsam, Orange (*Impatiens capensis*)  
 Balsam, Touch-me-not (*Impatiens noli-tangere*)  
 Beak-sedge, Brown (*Rhynchospora fusca*)  
 Beak-sedge, White (*Rhynchospora alba*)  
 Bedstraw, Common Marsh (*Galium palustre*)  
 Bedstraw, Fen (*Galium uliginosum*)  
 Bedstraw, Northern (*Galium boreale*)  
 Bedstraw, Slender Marsh (*Galium constrictum*)  
 Beggarticks (*Bidens frondosa*)  
 Bent, Creeping (*Agrostis stolonifera*)  
 Bent, Velvet (*Agrostis canina*)  
 Bird's-foot-trefoil, Greater (*Lotus pedunculatus*)  
 Bitter-cress, Large (*Cardamine amara*)  
 Bittersweet (*Solanum dulcamara*)  
 Bladder-moss, Norfolk (*Physcomitrium eurystomum*)  
 Blinks (*Montia fontana*)  
 Blood-drop-emlets (*Mimulus luteus*)  
 Bogbean (*Menyanthes trifoliata*)  
 Bog-rosemary (*Andromeda polifolia*)  
 Bog-rush, Black (*Schoenus nigricans*)  
 Bog-rush, Brown (*Schoenus ferrugineus*)  
 Bog-Sedge, Tall (*Carex magellanica*)  
 Brooklime (*Veronica beccabunga*)  
 Brookweed (*Samolus valerandi*)  
 Bryum, Matted (*Bryum calophyllum*)  
 Bryum, Sea (*Bryum warneum*)

Buckler-fern, Crested (*Dryopteris cristata*)  
 Buckthorn, Alder (*Frangula alnus*)  
 Bulrush (*Typha latifolia*)  
 Bulrush, Lesser (*Typha angustifolia*)  
 Bur-marigold, London (*Bidens connata*)  
 Bur-marigold, Nodding (*Bidens cernua*)  
 Bur-marigold, Trifid (*Bidens tripartita*)  
 Bur-reed, Branched (*Sparganium erectum*)  
 Butterbur (*Petasites hybridus*)  
 Butterbur, Greater (*Petasites japonicus*)  
 Buttercup, Celery-leaved (*Ranunculus sceleratus*)  
 Butterwort, Alpine (*Pinguicula alpina*)  
 Butterwort, Common (*Pinguicula vulgaris*)  
 Butterwort, Pale (*Pinguicula lusitanica*)  
 Canary-grass, Reed (*Phalaris arundinacea*)  
 Celendine, Lesser (*Ranunculus ficaria*)  
 Celery, Wild (*Apium graveolens*)  
 Centaury, Yellow (*Cicendia filiformis*)  
 Chickweed, Water (*Myosoton aquaticum*)  
 Cinquefoil, Marsh (*Potentilla palustris*)  
 Clubmoss, Marsh (*Lycopodiella inundata*)  
 Club-rush, Bristle (*Isolepis setacea*)  
 Club-rush, Common (*Schoenoplectus lacustris*)  
 Club-rush, Grey (*Schoenoplectus tabernaemontani*)  
 Club-rush, Round-headed (*S. holoschoenus*)  
 Club-rush, Sea (*Bolboschoenus maritimus*)  
 Club-rush, Sharp (*Schoenoplectus pungens*)  
 Club-rush, Triangular (*Schoenoplectus triquetus*)  
 Club-rush, Tufted (*Isolepis cernua*)  
 Comfrey, Common (*Symphytum officinale*)  
 Coral-necklace (*Illecebrum verticillatum*)  
 Cottongrass, Broad-ld (*Eriophorum latifolium*)  
 Cottongrass, Common (*Eriophorum angustifolium*)  
 Cottongrass, Hare's-tail (*Eriophorum vaginatum*)  
 Cottongrass, Slender (*Eriophorum gracile*)  
 Cowbane (*Cicuta virosa*)  
 Creeping-Jenny (*Lysimachia nummularia*)  
 Crowfoot, Ivy-leaved (*Ranunculus hederaceus*)  
 Crowfoot, Round-leaved (*Ranunculus omiophyllus*)  
 Cuckooflower (*Cardamine pratensis*)  
 Cudweed, Marsh (*Gnaphalium uliginosum*)  
 Cut-grass (*Leersia oryzoides*)  
 Deergass (*Trichophorum cespitosum*)  
 Deergass (*Trichophorum cespitosum*)  
 Dock, Golden (*Rumex maritimus*)  
 Dock, Marsh (*Rumex palustris*)  
 Dock, Scottish (*Rumex aquaticus*)  
 Dock, Water (*Rumex hydrolapathum*)  
 Fen-sedge, Great (*Cladium mariscus*)  
 Fern, Marsh (*Thelypteris palustris*)  
 Fern, Royal (*Osmunda regalis*)  
 Figwort, Green (*Scrophularia umbrosa*)  
 Figwort, Water (*Scrophularia auriculata*)  
 Flat-sedge (*Blysmus compressus*)  
 Fleabane, Common (*Pulicaria dysenterica*)  
 Fleabane, Small (*Pulicaria vulgaris*)  
 Flowering-rush (*Butomus umbellatus*)  
 Forget-me-not, Creeping (*Myosotis secunda*)  
 Forget-me-not, Pale (*Myosotis stolonifera*)  
 Forget-me-not, Tufted (*Myosotis laxa*)  
 Forget-me-not, Water (*Myosotis scorpioides*)  
 Fox-sedge, False (*Carex otrubae*)  
 Fox-sedge, True (*Carex vulpina*)  
 Foxtail, Alpine (*Alopecurus borealis*)  
 Foxtail, Marsh (*Alopecurus geniculatus*)  
 Foxtail, Orange (*Alopecurus aequalis*)  
 Galingale (*Cyperus longus*)  
 Galingale, Brown (*Cyperus fuscus*)  
 Galingale, Pale (*Cyperus eragrostis*)  
 Germander, Water (*Teucrium scordium*)  
 Gipsywort (*Lycopus europaeus*)  
 Golden-saxifrage, Alt.-leaved (*C. alternifolium*)  
 Golden-saxifrage, Opp.-leaved (*C. oppositifolium*)  
 Grass-of-Parnassus (*Parnassia palustris*)  
 Grass-poly (*Lythrum hyssopifolia*)  
 Hair-grass, Tufted (*Deschampsia caespitosa*)  
 Hawk's-beard, Marsh (*Crepis paludosa*)  
 Heath, Cross-leaved (*Erica tetralix*)  
 Helleborine, Marsh (*Epipactis palustris*)  
 Hemlock (*Conium maculatum*)  
 Hemp-agrimony (*Eupatorium cannabinum*)  
 Horsetail, Marsh (*Equisetum palustre*)  
 Horsetail, Water (*Equisetum fluviatile*)  
 Iris, Yellow (*Iris pseudacorus*)  
 Lobelia, Heath (*Lobelia urens*)  
 Loosestrife, Lake (*Lysimachia terrestris*)  
 Loosestrife, Tufted (*Lysimachia thyrsiflora*)  
 Loosestrife, Yellow (*Lysimachia vulgaris*)  
 Lousewort, Marsh (*Pedicularis palustris*)  
 Marsh-marigold (*Caltha palustris*)  
 Marshwort, Creeping (*Apium repens*)  
 Meadow-rue, Common (*Thalictrum flavum*)  
 Meadowsweet (*Filipendula ulmaria*)  
 Milk-parsley (*Peucedanum palustre*)  
 Mint, Round-leaved (*Mentha suaveolens*)  
 Mint, Water (*Mentha aquatica*)  
 Monkeyflower (*Mimulus guttatus*)  
 Moor-grass, Purple (*Molinia caerulea*)  
 Mudwort (*Limosella aquatica*)  
 Musk (*Mimulus moschatus*)  
 Myrtle, Bog (*Myrica gale*)  
 Orchid, Bog (*Hammarbya paludosa*)  
 Orchid, Common Spotted (*Dactylorhiza fuchsii*)  
 Orchid, Early Marsh (*Dactylorhiza incarnata*)  
 Orchid, Fen (*Liparis loeselii*)  
 Orchid, Heath Spotted (*Dactylorhiza maculata*)  
 Orchid, Lapland Marsh (*Dactylorhiza lapponica*)  
 Orchid, Narrow-ld Marsh (*D. traunsteinerioides*)  
 Orchid, Northern Marsh (*Dactylorhiza purpurella*)  
 Orchid, Southern Marsh (*Dactylorhiza praetermissa*)  
 Orchid, Western Marsh (*Dactylorhiza majalis*)  
 Pea, Marsh (*Lathyrus palustris*)  
 Pearlwort, Procrumbent (*Sagina procumbens*)  
 Pennyroyal (*Mentha pulegium*)  
 Pennywort, Marsh (*Hydrocotyle vulgaris*)  
 Persicaria, Pale (*Persicaria lapathifolia*)  
 Petalwort (*Petalophyllum ralfsii*)  
 Pigmyweed (=rare native) (*Crassula aquatica*)  
 Pillwort (*Pilularia globulifera*)  
 Pimpernel, Bog (*Anagallis tenella*)  
 Pond-sedge, Greater (*Carex riparia*)  
 Pond-sedge, Lesser (*Carex acutiformis*)  
 Poplar (list if species known) (*Populus spp.*)  
 Purple-loosestrife (*Lythrum salicaria*)  
 Ragged-Robin (*Lychnis flos-cuculi*)  
 Ragwort, Broad-leaved (*Senecio fluviatilis*)  
 Ragwort, Fen (*Senecio paludosus*)  
 Ragwort, Marsh (*Senecio aquaticus*)  
 Rannoch-rush (*Scheuchzeria palustris*)  
 Reed, Common (*Phragmites australis*)  
 Rush, Blunt-flowered (*Juncus subnodulosus*)  
 Rush, Bulbous (*Juncus bulbosus*)  
 Rush, Compact (*Juncus conglomeratus*)  
 Rush, Frog (*Juncus ambiguus*)  
 Rush, Hard (*Juncus inflexus*)  
 Rush, Jointed (*Juncus articulatus*)  
 Rush, Leafy (*Juncus foliosus*)  
 Rush, Pigmy (*Juncus pygmaeus*)  
 Rush, Round-fruited (*Juncus compressus*)  
 Rush, Sharp-flowered (*Juncus acutiflorus*)  
 Rush, Soft (*Juncus effusus*)  
 Rush, Toad (*Juncus bufonius* (s.s.))  
 Rush, Toad and Frog grp. (*Juncus bufonius* (s.l.))  
 Sedge species undt. (*Carex spp.*)  
 Sedge, Bladder (*Carex vesicaria*)  
 Sedge, Bog (*Carex limosa*)  
 Sedge, Bottle (*Carex rostrata*)  
 Sedge, Brown (*Carex disticha*)  
 Sedge, Carnation (*Carex panicea*)  
 Sedge, Common (*Carex nigra*)  
 Sedge, Curved (*Carex maritima*)  
 Sedge, Cyperus (*Carex pseudocyperus*)  
 Sedge, Dioecious (*Carex dioica*)  
 Sedge, Elongated (*Carex elongata*)  
 Sedge, Flea (*Carex pulicaris*)  
 Sedge, Glaucous (*Carex flacca*)  
 Sedge, Pendulous (*Carex pendula*)  
 Sedge, Slender (*Carex lasiocarpa*)  
 Sedge, Smooth-stalked (*Carex laevigata*)  
 Sedge, Spiked (*Carex spicata*)  
 Sedge, Star (*Carex echinata*)  
 Sedge, Tawny (*Carex hostiana*)  
 Sedge, Tufted (*Carex elata*)  
 Sedge, Water (*Carex aquatilis*)  
 Sedge, White (*Carex curta*)  
 Skullcap (*Scutellaria galericulata*)  
 Skullcap, Lesser (*Scutellaria minor*)  
 Small-reed, Narrow (*Calamagrostis stricta*)  
 Small-reed, Purple (*Calamagrostis canescens*)  
 Small-reed, Scandinavian (*Calamagrostis purpurea*)  
 Small-reed, Scottish (*Calamagrostis scotica*)  
 Small-reed, Wood (*Calamagrostis epigejos*)  
 Sneezewort (*Achillea ptarmica*)  
 Sow-thistle, Marsh (*Sonchus palustris*)  
 Spearwort, Adder's-tongue (*R. ophioglossifolius*)  
 Spearwort, Creeping (*Ranunculus reptans*)  
 Spearwort, Greater (*Ranunculus lingua*)  
 Spearwort, Lesser (*Ranunculus flammula*)  
 Speedwell, Marsh (*Veronica scutellata*)  
 Spike-rush, Common (*Eleocharis palustris*)  
 Spike-rush, Few-flowered (*Eleocharis quinqueflora*)  
 Spike-rush, Many-stalked (*Eleocharis multicaulis*)  
 Spike-rush, Needle (*Eleocharis acicularis*)  
 Spike-rush, Northern (*Eleocharis mamillata*)  
 Spike-rush, Slender (*Eleocharis uniglumis*)  
 St Johns-wort, Marsh (*Hypericum elodes*)  
 St Johns-wort, Square-stalked (*H. tetrapterum*)  
 St Johns-wort, Wavy (*Hypericum undulatum*)  
 Starfruit (*Damasonium alisma*)  
 Stitchwort, Bog (*Stellaria uliginosa*)  
 Stitchwort, Marsh (*Stellaria palustris*)  
 Strapwort (*Corrigiola litoralis*)  
 Sundew, Great (*Drosera anglica*)  
 Sundew, non-native species (*Drosera binata*)  
 Sundew, non-native species (*Drosera capensis*)  
 Sundew, Oblong-leaved (*Drosera intermedia*)  
 Sundew, Round-leaved (*Drosera rotundifolia*)  
 Sweet-flag (*Acorus calamus*)  
 Sweet-grass species undt. (*Glyceria sp.*)  
 Sweet-grass, Floating (*Glyceria fluitans*)  
 Sweet-grass, Plicate (*Glyceria notata*)  
 Sweet-grass, Reed (*Glyceria maxima*)  
 Sweet-grass, Small (*Glyceria declinata*)  
 Tasselweed, Beaked (*Ruppia maritima*)  
 Tasselweed, Spiral (*Ruppia cirrhosa*)  
 Thistle, Marsh (*Cirsium palustre*)  
 Thistle, Meadow (*Cirsium dissectum*)  
 Thread-moss, Knowlton's (*Bryum knowltonii*)  
 Threadwort, Toothed (*Cephaloziella dentata*)  
 Tormentil (*Potentilla erecta*)  
 Tufted-sedge, Slender (*Carex acuta*)  
 Tussock-sedge, Greater (*Carex paniculata*)  
 Tussock-sedge, Fibrous (*Carex appropinquata*)  
 Tussock-sedge, Lesser (*Carex diandra*)  
 Valerian, Marsh (*Valeriana dioica*)  
 Violet, Fen (*Viola persicifolia*)  
 Violet, Marsh (*Viola palustris*)  
 Viper's-grass (*Scorzonera humilis*)  
 Water-plantain (*Alisma plantago-aquatica*)  
 Water-cress (*Rorippa nasturtium-aquaticum* (s.l.))  
 Water-cress (*Rorippa nasturtium-aquaticum* (s.s.))  
 Water-cress, Fool's (*Apium nodiflorum*)  
 Water-cress, Narrow-fruited (*Rorippa microphylla*)  
 Water-dropwort, Corky-fruited (*O. pimpinelloides*)  
 Water-dropwort, Fine-leaved (*Oenanthe aquatica*)  
 Water-dropwort, Hemlock (*Oenanthe crocata*)  
 Water-dropwort, Narrow-leaved (*Oenanthe silaifolia*)  
 Water-dropwort, Parsley (*Oenanthe lachenalii*)  
 Water-dropwort, Tubular (*Oenanthe fistulosa*)  
 Water-parsnip, Greater (*Sium latifolium*)  
 Water-parsnip, Lesser (*Berula erecta*)  
 Water-pepper (*Persicaria hydropiper*)  
 Water-pepper, Small (*Persicaria minor*)  
 Water-pepper, Tasteless (*Persicaria mitis*)  
 Water-plantain, Lesser (*Baldellia ranunculoides*)  
 Water-plantain, Narrow-leaved (*Alisma lanceolatum*)  
 Water-plantain, Ribbon-leaved (*Alisma gramineum*)  
 Water-purslane (*Lythrum portula*)  
 Water-Speedwell, Blue (*Veronica anagallis-aquatica*)  
 Water-Speedwell, Pink (*Veronica catenata*)  
 Whorl-grass (*Catabrosa aquatica*)  
 Willowherb species undt. (*Epilobium sp.*)  
 Willowherb, Alpine (*Epilobium anagallidifolium*)  
 Willowherb, American (*Epilobium ciliatum*)  
 Willowherb, Chickweed (*Epilobium alsinifolium*)  
 Willowherb, Great (*Epilobium hirsutum*)  
 Willowherb, Hoary (*Epilobium parviflorum*)  
 Willowherb, Marsh (*Epilobium palustre*)  
 Willowherb, New Zealand (*Epilobium brunnescens*)  
 Willowherb, Short-fruited (*Epilobium obscurum*)  
 Willowherb, Square-stalked (*Epilobium tetragonum*)  
 Wintergreen, Round-leaved (*Pyrola rotundifolia*)  
 Wood-rush, Great (*Luzula sylvatica*)  
 Wood-rush, White (*Luzula luzuloides*)  
 Woundwort, Marsh (*Stachys palustris*)  
 Yellow-cress, Great (*Rorippa amphibia*)  
 Yellow-cress, Marsh (*Rorippa palustris*)  
 Yellow-cress, Northern (*Rorippa islandica*)  
 Yellow-sedge ssp. (*C. viridula ssp. brachyrrhyncha*)  
 Yellow-sedge ssp. (*C. viridula ssp. oedocarpa*)  
 Yellow-sedge ssp. (*C. viridula ssp. viridula*)

Please complete a POND HABITAT SURVEY sheet at each pond surveyed.

This is a really important part of the survey at your pond. PSYM environmental variables are used to calculate pond quality. Critical PSYM metrics are indicated by a shaded box – we cannot calculate a PSYM score for the pond unless these have been submitted. Other metrics will give us a full picture of pond quality (including calculating an HSI score for Great Crested Newts).

Go to: [www.freshwaterhabitats.org.uk/projects/pondnet/survey-options/habitats](http://www.freshwaterhabitats.org.uk/projects/pondnet/survey-options/habitats) for survey guides and more information.

Is the pond new? (less than 10 yrs old)  
yes, no, unknown

Year of creation?  
date, decade, unknown

Pond Altitude  
(m)

**Area**
 m<sup>2</sup>

**Note:** This is the *surface area of the pond when the water is at its highest level (usually in early spring)*. It will probably *not* be the current water level of the pond. The high water level line should be evident from wetland vegetation like rushes at the pond's outer edge. Measure by pacing (single pace = 0.8-1m) or use online maps.

**Pond dries?**


1 = never dries  
2 = rarely dries  
3 = sometimes  
4 = annually

**1 = Never dries, 2 = Rarely dries:** no more than two years in any ten year period, or only in drought, **3 = Sometimes dries:** dries between three years in ten to most years, **4 = Dries annually.** Deduce pond permanence from local knowledge (e.g. landowner) and personal judgement e.g. water level at the time of the survey. Ponds that dry out annually usually have a hard base.

**Overhanging trees & shrubs**


% of pond overhung by trees and shrubs

% pond margin overhung to at least 1m from the pond margin

This is an estimate of how much of the pond is *directly* overhung by trees and shrubs, i.e. that would be shaded if the sun was overhead (use the diagram (below) as a guide).

**Waterfowl impact**


1 = major  
2 = minor  
3 = none

**Major** = severe impact of waterfowl e.g. few or no submerged plants, water turbid, pond banks have patches where vegetation removed, feed put down; **Minor** = waterfowl present, but little impact on pond vegetation, pond still supports submerged plants and banks are not denuded of vegetation; **None** = no evidence of waterfowl impact (moorhens may be present).

**Fish presence**


1 = major  
2 = minor  
3 = possible  
4 = absent

**Major** = dense populations of fish known to be present; **Minor** = small numbers of Crucian Carp, goldfish or stickleback known to be present; **Possible** = no evidence of fish, but local conditions suggest that they may be present; **Absent** = no records of fish stocking and no fish revealed during survey.

**Disturbance by dogs**


1 = major  
2 = minor  
3 = none

**Major** = dogs repeatedly use the pond, compacted edges with little vegetation, water very turbid; **Minor** = dogs use the pond, but little impact on pond vegetation, pond still supports submerged plants and banks are not denuded of vegetation; **None** = no evidence that dogs are using the pond.

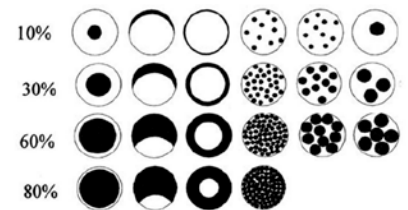
**Aquatic vegetation:** includes emergent, floating and submerged plants

 %

% of the whole pond (wet and dry) occupied by emergent vegetation – incl. plants like grasses, water mint and rushes, but not floating (e.g. pondweed) or submerged (e.g. water-crowfoot) species.

 %

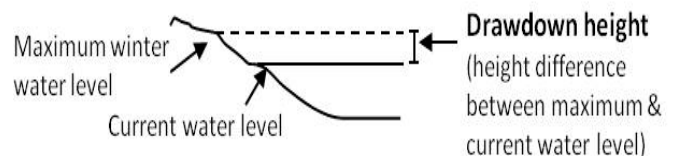
% of pond water surface area covered by all vegetation (emergent, floating (excl. duckweed) and submerged).


**Water left in the pond**
 %

% of water area in pond relative to maximum water level. This can be 0% if the pond has dried out.

 cm

Drawdown. The height drop from the maximum winter water level to current level (see diagram).


**Grazing**


Tick if there is evidence the pond is grazed by livestock. If **yes**, complete the following boxes:

 %

% of whole pond grazed (note: stock can wade into shallow ponds to graze).

 %

% of pond perimeter grazed (note: stock can wade into shallow ponds to graze otherwise inaccessible edges).

Grazing intensity: rank 1-5 (1=infrequent or low intensity to 5 = margins heavily poached and almost bare).

**Pond management (tick):** use tick boxes to list management within the last 12 months. Use 'other' box for any extra info.

 Fully dredged

 Partly dredged

 >5% vegetation removed

 <5% vegetation removed

 Trees planted

 Trees clear-felled

 Trees cut back / coppiced

 Pond changed shape / size

 Plants introduced

 Bank plants mown

 Structural work e.g. to dam

 Straw added

Add other or more detail

**Water quality:**

**Turbidity / water clarity:** Estimate turbidity looking down into c.20cm depth of water in the pond.

1 = clear; 2 = moderately clear; 3 = moderately turbid; 4 = turbid

**Inflows and outflows:** (tick if inflow or outflow present or leave blank)

**Inflow present**

**Outflow present**

**Water chemistry:** If suitable kits and meters are available (or leave blank)

**pH**

**Conductivity ( $\mu\text{S cm}^{-1}$ )**

**Nitrate ( $\text{NO}_3\text{-N ppm}$ ):** PPW kits provided by FHT  
(tick one from the following range categories)

<0.2   0.2-0.5   0.5-1   1-2   2-5   5-10   10 +

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**Phosphate ( $\text{PO}_4\text{-P ppm}$ ):** PPW kits provided by FHT  
(tick one from the following range categories)

<0.02   0.02-0.05   0.05-0.1   0.1-0.2   0.2-0.5   0.5-1   1 +

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**Pond base:**

This refers to the *geology* (i.e. rock-type) that immediately underlies the pond. You may know, or be able to see the underlying geology in the base or banks of the pond, especially in new ponds. If not, check a geology map or leave this section blank.

Choose one of the following to categorise the % composition of **each** of pond base: 1= 0-32%, 2= 33-66%, 3= 67-100%

**Silt/ clay**

**Sand, gravel, cobbles**

**Hard rock**

**Peat**

**Other (please specify)**

**Surrounding land use:**

Estimate the percentage of surrounding land-use in distance zones from the pond perimeter (i.e. the maximum winter water level) used to assess pond area. In many ponds the 0-5m zone will include surrounding trees/scrub.

Habitat	0-5m	0-100m	Examples
Trees, woodland & scrub	%	%	Deciduous and coniferous woodland, individual trees, scrub and hedgerows.
Heath & moorland			Lowland and upland heathland, moorland and mountain; includes bracken.
Rank vegetation			Unmanaged grass, neglected and abandoned land, set-aside, verges and buffer strips.
Unimproved grassland			Herb-rich, calcareous and acid grassland (good quality plant indicators usually present). Low percentage of agricultural grasses. Not fertilised, little or no drainage.
Semi-improved grassland			A transition category. Grasslands modified by fertilisers, drainage, herbicides or intensive grazing, but retaining elements of natural grassland types in the area.
Improved grassland			Fertile agricultural grass, often bright green and lush; including parks and golf greens.
Arable			All crops. Includes flower and fruit crops (e.g. strawberries) and ploughed land.
Urban buildings & gardens			Areas in curtilage (associated with buildings); including glass-houses and farm yards.
Roads, tracks & paths			Including car-parks and footpaths.
Rock, stone & gravel			Cliffs, rock-outcrops, gravel-pits, quarries, areas of sand and gravel or stone.
Bog, fen, marsh & flush			Wetland vegetation and blanket bog.
Ponds & lakes			Permanent and seasonal waterbodies; including trackway pools.
Streams & ditches			Rivers, streams, ditches, springs and canals.
Other (state)			E.g. maritime vegetation, saltmarsh, sand-dune, orchards and railways.

**Is the pond in a protected area?** (e.g. nature reserve, SSSI, etc.)

(choose one option - yes, no, unknown)

**Invasive non-native species:** Record any non-native invasive species you know to be present in the pond, or leave blank if you are unsure. Visit <https://freshwaterhabitats.org.uk/projects/pondnet/survey-options> for tips on identification (please tick all that apply).

**New Zealand Pigmyweed**  
*Crassula helmsii*

**Floating Pennywort**  
*Hydrocotyle ranunculoides*

**Non-native Pondweed, e.g.:**  
Canadian Pondweed *Elodea canadensis*,  
Nuttall's Pondweed *Elodea nutallii*,  
Curly Waterweed *Lagarosiphon major*

**Parrot's Feather**  
*Myriophyllum aquaticum*

**Water Fern**  
*Azolla filiculoides*

**Location score for Great Crested Newts (select pond location based on map to right)**


A (optimal), B (marginal) or C (unsuitable)

**Number of ponds:** Note: ponds are <2ha in size - to help you calculate the total use the PondNet map, an OS map, Google maps, or other mapping tool):

Number of *other* ponds (exclude the survey pond) in a *1km radius circle* centred on the pond centre. Omit ponds separated by amphibian barriers e.g. large rivers or roads.

If there are more than 12 ponds present in the 1km radius, you can just tick this box.


**Habitat quality for amphibians:** (choose one option - 1 = none, 2 = poor, 3 = moderate, 4 = good)

**None** = clearly no suitable habitat within immediate pond locale; **Poor** = habitat with poor structure that offers limited opportunities for foraging and shelter (e.g. amenity grassland); **Moderate** = offers opportunities for foraging and shelter, but may not be extensive; **Good** = extensive habitat that offers good opportunities for foraging and shelter completely surrounds pond e.g. rough grassland, scrub or woodland.

**Water quality for amphibians:** (choose one option - 1 = bad, 2 = poor, 3 = moderate, 4 = good)

**Bad** = clearly polluted, only pollution-tolerant invertebrates, no submerged plants; **Poor** = low invertebrate diversity, few submerged plants; **Moderate** = moderate invertebrate diversity; **Good** = abundant and diverse invertebrate community, often surrounded by semi-natural land e.g. grassland, heath, woodland.

**How much of pond perimeter could be surveyed?** Note areas of the pond which were not accessible.

**Comments box:** e.g. new ownership, changes since previous visit, any other information about the pond.

**Pond sketch map:** Make a sketch map of your pond, marking on variables such as amount of shade and patches of emergent vegetation. These will help you to calculate percentage cover and provide a record of the pond which you or others can use on future visits.

You can also take a photo of your pond or your maps (or scan them if you have a scanner) and upload them with the record [www.freshwaterhabitats.org.uk/projects/waternet](http://www.freshwaterhabitats.org.uk/projects/waternet).