

Floating Pennywort, *Hydrocotyle ranunculoides*



Overview

Short description of *Hydrocotyle ranunculoides*, Floating Pennywort

Somewhat fleshy stems with roundish-reniform, bluntly toothed leaves held horizontal but above the substrate, creeping through other vegetation, over soil or over the surface of the water. Flowers without petals, greenish, held erect but on peduncles shorter than the petioles.

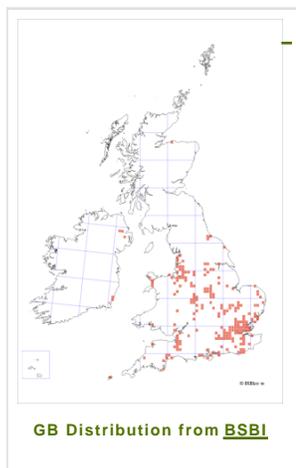
Description of *Hydrocotyle ranunculoides*, Floating Pennywort status in GB

Floating pennywort is widespread and well established in aquatic habitats the south and east of England and appears to be spreading rapidly north and westwards.

Habitat summary: *Hydrocotyle ranunculoides*, Floating Pennywort

In its native habitat, it occurs in shallow pools, the drawdown zones of lakes and in shaded seasonally inundated wetlands. In GB, it has been recorded from still or slow-flowing water in lakes, ponds, streams, ditches and canals.

Distribution map



GB Distribution from [BSBI](#)

Author's name:

R.V. Lansdown (edited by Kevin Walker, June 2017)

Last updated:

September 8th 2017

We try to keep these factsheets up to date, however if you notice any issues please contact us

Overview table

Environment:	Freshwater
Species status:	Non-Native
Native range:	Northern America, Southern America
Functional type:	Land plant
Status in England:	Non-Native
Status in Scotland:	Non-Native
Status in Wales:	Non-Native
Location of first record:	v.c.18
Date of first record:	1990

Invasion history: *Hydrocotyle ranunculoides*, Floating Pennywort

Origin

Floating pennywort is native to the southern coastal United States, from Philadelphia south and west to Texas, and south to Panama, Cuba and South America.

First Record

It was first recorded in Essex in 1990.

Pathway and Method

It was introduced to GB as an ornamental plant for garden ponds and aquaria from which it spread to natural habitats. Plant fragments may also spread with birds or other animals, but there are no quantitative data available; carried downstream along waterways and possibly upstream attached to boats.

Species Status

It has become established in Australia, South America, Africa, Austria, Belgium, Denmark, Italy, the Netherlands and Portugal. However, it is only considered to be

invasive in GB, Belgium and the Netherlands. In France it is naturalised in Corsica, around Paris and maybe more widely in the south, it appeared in Germany in 2004 and is spreading. It is now widely established around and to the north-west of London, at a number of sites on the south coast, the Gwent Levels and in the north-west Midlands, in a total of more than 50 10 km squares

Ecology & Habitat: *Hydrocotyle ranunculoides*, Floating Pennywort

Dispersal Mechanisms

It has no natural dispersal mechanisms in GB, but plant fragments and seed may also spread with birds or other animals, but there are no quantitative data available; carried downstream along waterways and possibly upstream attached to boats.

Reproduction

It is likely that the main reproductive strategy is vegetative (Preston *et al.* 2002). Like many aquatic plants, it is likely that very small fragments are able to root, thus aiding establishment. Seed form in GB, but the extent to which they play a role in reproduction is not known.

Known Predators/Herbivores

None known.

Resistant Stages

None known.

Habitat Occupied in GB

It is widespread in canals, ditches and slow-flowing rivers and has been recorded from ponds and gravel pits.

Distribution: *Hydrocotyle ranunculoides*, Floating Pennywort

Floating pennywort is concentrated in an area around and to the north of London into coastal Norfolk, with a few records along the south coast, the Gwent Levels and the West Midlands, from Cheshire northwards.

Impacts: *Hydrocotyle ranunculoides*, Floating Pennywort

Environmental Impact

Dense growth of floating pennywort can disrupt natural erosion-deposition processes, disrupt the movement of animals, out-compete native aquatic plants, block light needed for photosynthesis, disrupt predator - prey relationships, prevent wind mixing, leading to localised oxygen depletion, create mosquito breeding areas and increase water temperature by absorbing sunlight, while die back can increase nutrient loads to the water.

Health and Social Impact

Potential impacts include: detriment to tourism, fishing and water sports.

Economic Impact

In the Netherlands, some water boards faced a doubling of costs each year during the 1990s, and, in 2000, the total annual control costs were around 1 Million Euro. In the Canning River in Western Australia floating pennywort became a serious problem in 1992. A program costing over AU\$ 200,000 in the first year was implemented. In GB, the estimate for control of the total area infested by floating pennywort by herbicides is between £250,000 and £300,000 per year. It can also disrupt navigation, damage waterworks by blocking pipes and pumps, or lead to flooding as well as disrupting commercial fishing and other commercial exploitation of water bodies.

References & Links: *Hydrocotyle ranunculoides*, Floating Pennywort

Identification

Stace, C.A. (2010) *New flora of the British Isles*, Third Edition, Cambridge University Press, Cambridge.

Lansdown, R.V. (2009) *A field guide to the riverine plants of Britain and Ireland*. Ardeola, Stroud, Gloucestershire.

Biology, ecology, spread, vectors

Non-native species secretariat risks and action plans (<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=240>)

Management and impact

Non-native species secretariat risks and action plans (<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=240>)

General

Non-native species secretariat risks and action plans (<https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=240>)