

A native of North America, it was first brought to Britain in the 1980s as a plant for tropical aquaria and garden ponds, and was first noted in the wild in Essex in 1991.

Distribution map - Floating Pennywort

Source: Botanical Society of the British Isles (2010)

A downloadable identification sheet for this species is available at [www.nonnativespecies.org](http://www.nonnativespecies.org)

Separate leaflets are available outlining the legal requirements and responsibilities for landowners.

The correct disposal of plant material is vital because there is a high risk of spreading the problem further. Contact the Environment Agency (England and Wales) or SEPA (Scotland) for advice on disposal.

Environment Agency - Tel: 08708 506 506  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Scottish Environment Protection Agency  
Tel : 01786 457 700 [www.sepa.org.uk](http://www.sepa.org.uk)

Further information may also be found on the Centre for Ecology & Hydrology web pages:  
[http://www.ceh.ac.uk/sci\\_programmes/AquaticPlantManagement.html](http://www.ceh.ac.uk/sci_programmes/AquaticPlantManagement.html)

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For disclaimer see [www.nonnativespecies.org](http://www.nonnativespecies.org)

**A local project is currently underway with the aim of tackling Invasive Non Native Species (INNS) in the Tame Valley Wetlands scheme area.**

**We are asking local landowners, friends of groups and other interested parties to help us in this task to prevent the spread of these invasive species and promote native flora.**

**If you would like to know more about our project, need advice or help with management, we would like to hear from you.**

### Tame Valley Wetlands

Hams Hall Environmental Centre  
Off Canton Lane  
Coleshill  
Warwickshire  
B46 1GA

Phone:  
01675 470917

E-mail:  
[enquiries@tamevalleywetlands.co.uk](mailto:enquiries@tamevalleywetlands.co.uk)



**Tame  
Valley  
Wetlands**



## Control of invasive non-native species

### Floating Pennywort *Hydrocotyle ranunculoides*



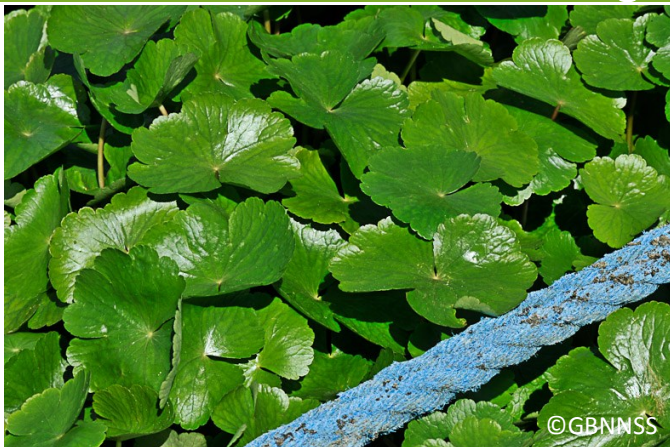
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Floating pennywort forms dense interwoven mats of vegetation, with stem growth rates of up to 20cm per day. These quickly cover the water surface interfering with both the ecology and amenity uses of the water body.





# Control methods for Floating Pennywort



The leaves are emergent, rising on stalks from horizontally growing stems. Both the stem and the petioles are fleshy. The leaf form ranges from circular to kidney-shaped; they are deeply lobed, and up to 180mm across. Leaves are held above the water surface whilst the interwoven mat of roots and stems sink up to 50cm into the water.

## Control

Chemical control can be achieved with herbicides containing 2,4-D amine. Glyphosate is less effective.

Cutting and removal is a very good method of management, but it will not reduce the vigour of the plant.

The cut or dredged material should be left on site at the top of the bank, well away from water. Hand pulling works well. Eradication is possible using this technique, and has been achieved in Cornwall.

## Non-chemical control

### Cutting

Regular cutting from May to October will prevent complete dominance of this species. Cut material should be removed from the water immediately. Cutting should be followed by hand pulling or by spot treatment with chemicals to reduce the risk of regrowth.

### Pulling or dredging

Hand pulling works very well in small infestations and as a follow-up after major mechanical removal. Eradication is possible using this technique.

### Grazing

Cattle grazing can damage the emergent stems, but it has no long-term effect on the dominance of the plant. There are no known biological control agents in the UK, but research is underway.



Floating pennywort roots freely from nodes at approximately 40-60mm intervals. The roots are profuse and hair-like. Maximum growth occurs in the late summer.



Floating pennywort grows in slow-flowing water bodies (e.g. ditches, canals and lakes) forming dense interwoven mats of vegetation.

## Chemical control

### Glyphosate

Applying glyphosate at 6 litres product in 400 litres of water per hectare is the most effective treatment with this chemical. Repeat treatments will be necessary throughout the growing season as soon as regrowth occurs.

### 2,4-D amine

Applying 2,4-D amine at 4.5 kg active ingredient in 200 litres of water per hectare provides temporary control. Re-treatment after exactly three weeks is required for more effective control.

### In general

The plant does not rot down very quickly after chemical treatment, and treated vegetation in flood-risk areas should be removed after two to three weeks if possible. Follow-up spot treatment after mechanical removal is recommended. Regular treatment is necessary.