

Floating Pennywort - Hydrocotyle ranunculoides

First naturalised in 1990 as a result of discarded plants from garden ponds. It spreads rapidly and can grow up to 20cm per day, quickly dominating a waterbody by forming thick mats and impeding water flow and amenity use. May out-compete native species by blocking out light, causing deoxygenation, obstructing air breathing insects and reducing water temperatures. It is found mostly in the south-east of England and occasionally in the northwest of England and Wales.

Management Options:

Chemical Treatment

Glyphosate at 6l/ha in 400 litres of water. Efficiency is greatly increased with use of the adjuvant Codacide Oil at 1l/ha.

Suitability: Particularly useful for terrestrial growth, thus avoiding deoxygenation problems. Good for sites

that have poor access for mechanical/manual removal, or as a treatment following mechanical

removal.

Equipment: Knapsack sprayer, preferably with a long-lance. Life jacket and any other personal protective

equipment deemed necessary after risk assessment.

Efficiency: Good, but less effective in late summer when the rafts become denser. However late summer

treatments are effective against re-growth if the site was treated earlier in the year.

Constraints: Requires AqHerb01 approval from the Environment Agency and NPTC PA1 & PA6

qualifications. Potential for damage to non-targets. There is a risk of deoxygenation if large

decomposing biomass is not removed.

Mechanical Cutting

Cut using a weedboat/reciprocating blades. The location should be netted to retain propagules.

Suitability: Useful for reducing biomass of large infestations, prior to chemical control.

Equipment: Specialist cutting equipment/weed boat. Vehicle & trailer if not disposing at site. Stop-nets and

sweep nets. Life jacket and any other personal protective equipment deemed necessary after

risk assessment.

Efficiency: Good, if propagules can be contained.

Constraints: Requires access if disposal is off-site. Expensive and it is likely that the treatment will have to

be repeated regularly, particularly in eutrophic situations. Avoid damage to the habitats of

sensitive species, such as water voles and nesting birds.

Mechanical Pulling

Pull using a hydraulic rake or bucket. The location should be netted to retain propagules.

Suitability: Useful for reducing biomass of large infestations, prior to chemical control or hand pulling. Has

a better long-term control on established infestations than cutting because the root mass is

also reduced.

Equipment: Weedboat/tractor fitted with hydraulic rake or bucket. Vehicle & trailer if not disposing at site.

Stop-nets and sweep nets. Life jacket and any other personal protective equipment deemed

necessary after risk assessment.

Efficiency: Good, particularly when the rafts are mature.

Constraints: Requires access. Avoid damage to the habitats of sensitive species, such as water voles and

nesting birds.

Manual Hand-Pulling

Dispose of pulled material by composting away from water habitats.

Suitability: Particularly relevant for smaller infestations, but can be very effective against any size of

infestation, depending on the resources and time available. Suitable for sites with good access

or sensitive areas where non-target damage is an issue. Suitable for volunteer groups.

Equipment: Boats, dry suits, wheelbarrows, forks, rakes. Vehicle & trailer if not disposing at site. Stop-nets

and sweep nets. Life jacket and any other personal protective equipment deemed necessary

after risk assessment.

Efficiency: Good, if propagules can be contained and resources exist to regularly repeat the task.

Constraints: Time-consuming, and requires good access.

Time Scale

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chemical												
Cutting												
Mech Pulling												
Hand Pulling												