



Information Sheet 9: Fennel Pondweed

In Britain there are 21 species of Pondweed and 4 hybrids, some of which are rare and others very scarce. Only *P. pectinatus*, *P. natans*, *P. crispus*, *P. perfoliatus* and occasionally *P. berchtoldii* and *P. pusillus* should be considered as weed species. Pondweeds can be locally troublesome, impeding flow and interfering with recreation and navigation. Probably the most troublesome species is Fennel Pondweed.

Potamogeton pectinatus is a submerged macrophyte. It is characterised by growth from a creeping stolon, which takes the form of dichotomously cylindrical branching stems and leaves. It only roots from the joint between the stolon

and the stem. It takes its common name, Fennel Pondweed, from the feathery appearance of the leaves in water. It can grow in still or flowing water. It reproduces vegetatively and by the production of "turions", which are specialised leaf buds formed at the end of Summer and into Autumn, which drop off into the sediment and from which a new plant grows in the following Spring. Turions are resistant to all forms of control apart from dredging.

Mechanical control

All Pondweed species can be cut but regrowth, especially early in the summer, is often rapid. Where Pondweeds have been cut regularly there is usually no evidence of any reduction in regrowth and the plant will tolerate this form of management almost indefinitely.

Mechanical control can be achieved by hand cutting, by weed bucket or by weed boat. Cutting should be as deep as possible to reduce the risk of regrowth later in the season. Cutting can be carried out at any time when there is sufficient growth to merit control, but as there is a risk of regrowth after early season cuts, cutting should normally not be carried out until mid to late summer.

Chemical control

In static waters, herbicides can give good control of Fennel Pondweed, although this species is seldom eradicated, probably because the turions are unaffected and regrow after the herbicide has degraded.

In static or slow flowing rivers with a velocity of less than 90 m/h dichlobenil (Midstream GSR, Casoron G or Luxan dichlobenil granules) can be used and in lakes where flow is less than 20 m/h terbutryn (Clarasan) can be used as an alternative. Where localised control is required, use the slow-release formulation Midstream GSR. Use terbutryn where control of algae as well as Pondweeds and other submerged weeds is required. Applications should be made early in the spring when growth is just starting.

Biological control

The use of herbivorous Grass Carp is appropriate as a control method for this plant. Common Carp, and other bottom feeding fish, which create turbid water, can also be effective in preventing regrowth of the plant after mechanical removal or control by a herbicide.

Environmental control

Shade will control most submerged aquatic plants. This can be achieved by planting trees on the south side of waterbodies or by using a floating sheet of opaque material. Care must be taken when using the latter to prevent sudden deoxygenation. This is usually only appropriate in small areas.

Best option

In mixed stands: Remove as much of the plant as possible by mechanical means and apply spot treatments of dichlobenil granules to remaining plant material.

In mono-specific stands in enclosed still waters use Clarosan.

If mechanical removal is not possible then treat with any of the appropriate herbicides being sure to read the label recommendations.

If you prefer a biological control option then use Grass Carp. Be sure to obtain all the necessary agreements from Defra, the Environment Agency and English Nature.

