



**Centre for
Ecology & Hydrology**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Centre for Aquatic Plant Management

Information Sheet ***Myriophyllum*** ***aquaticum*** **Parrot's Feather**

Myriophyllum aquaticum is an alien invasive species. It was first found in Britain in 1960 and is now found in about 300 sites in the UK. It is found mostly in

ponds, but has also been found in reservoirs, gravel pits, streams, canals and ditches. It is most often found in eutrophic water bodies. In contrast to other members of the genus, which are native to the UK, it is able to grow as a terrestrial plant when ponds dry out and has even been found growing on the dry bank of a council tip in Cornwall. It produces emergent shoots in addition to submerged ones which give it the characteristic feathery appearance reflected in its common name.

Only female plants have become established in the UK. It spreads by asexual means. Stems are brittle and the plant can propagate itself by growth of the small fragments of parent plants. Stem apices are better than other parts of the stem for regrowth, so during control, limit the number of loose stem apices produced.

Unfortunately the species is widely grown in small garden ponds and sold by aquatic garden centres and nurseries. It is most likely that all the introductions have been a result of escapes or discards from these situations. Often garden centres also sell *M. brasiliense*, or *M. propinacoides*, or *M. propium* all of which are highly invasive and should be avoided. They are native to lowland central South America and have become established in Europe in France and Austria to date. Introductions are usually not deliberate, but often occur as very small fragments in the soil of other purchased plants, such as water-lilies and emergent marginals.

Mechanical control

Mechanical control is effective for removing large infestations of this plant in areas where access is available for weed cutting buckets or boats. Care should be taken to restrict the downstream movement of stem fragments which will result from cutting operations as regrowth is rapid from this type of propagule. The stems of this species are especially brittle and fragmentation occurs readily when the plant is cut. Chemical control of remaining plants should be undertaken.

Chemical control

The plant is controlled by applications of dichlobenil in April.. It is also controlled by herbicides containing 2,4-D amine as the active ingredient in early April. It is also controlled by applications of glyphosate late in the season, and also to some extent by applications from April onwards.

Chemical control will lead to a short-term eradication of this species, as recolonisation from original sources will often occur. It is important to establish where the infestation has come from and take action to eliminate the source of material.

Biological control

Grass carp will not eat this species unless they are at least 2 years of age and then only reluctantly as long as no other preferred species are present

Environmental control



This species is not tolerant of fast flow and does not appear to grow in rivers or fast flowing streams. Increasing flow by narrowing slow flowing channels may be a way of controlling the growth of this species. This effect is achieved when the plant itself grows in slow flowing systems and may result in self-limitation in this type of channel.

Most emergent species are controlled by increasing shade. This can be achieved by planting trees along the south side of water bodies or by placing a floating opaque material over the water surface in early spring. Shade needs to be

maintained for at least twelve months to give good control.

Because of the association with eutrophic waters a reduction in the nutrient loading to the water may help reduce the competitive ability of this species and lead to a re-establishment of the native species. This can be achieved by buffer strips if non-point nutrient sources can be identified and by a reduction in phosphate loading from other point sources such as sewage works and farm effluents.

Best option

Spray with Reglone to control infestations in the short-term. Take action to reduce nutrient inputs to water for long-term eradication.