



Centre for
Ecology & Hydrology

NATURAL ENVIRONMENT RESEARCH COUNCIL

Centre for Aquatic Plant Management

Information Sheet *Sparganium Erectum* Branched Bur-Reed

There are 14 species of *Sparganium* of which 4 occur in Britain and Ireland. *Sparganium erectum* (Branched Bur-reed) and *Sparganium emersum* (Unbranched Bur-reed) are most likely to cause a weed problem. *S. angustifolium* (Floating Bur-reed) and *S. natans* (Least Bur-reed) are most common in the north and west of the UK, although there are isolated reports of both species in Hampshire and East Anglia. There are four recognised subspecies of *S. erectum* which can be treated as the same for control purposes.

S. erectum is most often found at the margins of lakes, rivers, streams, canals and drainage ditches in permanent water. It grows best in water between 10 and 20 cm deep in silty mud. It is easily uprooted and therefore does not grow well by fast-flowing rivers or streams. It is restricted to the shallow

margins and cannot withstand prolonged emersion. It is found in relatively nutrient rich waters. It grows actively from April and flowers from July to September with the fruits ripening in November. Plants spread by vegetative methods including growth of the rhizome, dispersal of detached rhizomes and by relocation of uprooted plants. Seedling survival is not high and may only be important for spread in undisturbed habitats. The plants are an important habitat for wildfowl nesting, roosting and feeding. The fruits form an important part of their diets in late Autumn and early Winter. For this reason complete elimination of stands should not be undertaken unless absolutely necessary.

Mechanical control

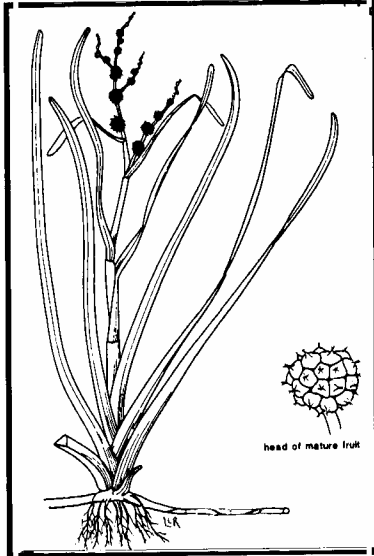
The plant is easily controlled by mechanical methods. It is easily uprooted and can be pulled out and disposed of if the stand is small enough. Regular cutting in summer (between June and August) will also eliminate this plant.

Chemical control

All emergent species are susceptible to the herbicide glyphosate. This should be applied at a rate of 5 litres per hectare in 200 litres of water to the emergent material between July and September. It should be remembered that early applications will reduce the efficacy of control with some plants surviving to regrow in following seasons. This may be advantageous where complete elimination is not required. The effect of thinning dense stands can be achieved by earlier applications to retain a wildlife habitat while not restricting flow capacity to a significant extent. Repeated applications will be necessary after two or three years if the stand has regrown.

Biological control

Cattle and other livestock which drink from water margins will eliminate this species both by uprooting it and eating it. Although not a classical method of biological control the extent and spread of stands can be limited by controlled access of livestock to marginal vegetation.



Environmental control

This species is controlled by shade created by planting trees. It is also controlled by lowering water levels to dry out stands for a period of between 6 weeks and 3 months. It is controlled by increasing water depth to greater than 50 cm or by increasing flow significantly

Best option

If the stand is small then remove by hand, pulling out each plant. If the stand is larger either cut repeatedly for three to four years during July or apply a herbicide containing glyphosate to areas which are required to be controlled.