

# *Damasonium alisma* Miller

Starfruit

Key:

**Dots** refer to the native sites of the species

**Numbers** refer to the nearby Botanical Collections



## *Starting references*

### **Family**

Alismataceae

### **IUCN category (2001)**

Critically Endangered

### **Habit**

Aquatic herb (annual).

### **Habitat**

Acidic mud by small ponds.

### **Reasons for decline**

Neglect and mismanagement of ponds on grazed commons or greens, including over-shading by trees and shrubs, with associated collection of leaf litter and the excessive growth of submerged and marginal plants.

Loss of habitat through development, drainage and in-filling of pools and wet hollows.

Introduction of water level controls reducing seasonal fluctuations.

Introduction of invasive, non-native species of water plants.

### **Distribution in wild**

Country	Locality & Vice County	Sites (10km <sup>2</sup> occurrences)	Population (plants)
England	Area bounded by Buckinghamshire, Hampshire, Kent & Sussex	4	40 in 1996

## *Ex situ Collections*

### **Gardens close to the region of distribution of the species**

- 1 University of Oxford Botanic Garden
- 2 Akely Wood Farmhouse
- 3 Cliveden (NT)
- 4 The Harris Garden
- 5 Windsor, The Savill & Valley Gardens
- 6 RBG Kew

### **Gardens with specialisation on family Alismataceae**

Ness Botanic Gardens

### **Potential to grow the species in *ex situ* Collections**

From Hugh A. McAllister pers. comm.

- Propagation and Cultivation details

Germination induced by scarification done with insect dissecting needles under a dissecting microscope. The chipped seeds were put in tap water in very small (c. 50 ml) beakers on the windowsill outside my room (i.e. not in direct sunlight). The tiny seedlings, which looked like detached grass leaves, were grown in the beakers until large enough to be planted in garden soil in 7 cm pots and placed in the sink and haven't been touched since beyond collecting seed, topping up with tap water, and removal of algae and duckweed by raking with fingers.

Were the seed sown in the mud? - no.

What kind of soil? - none.

Does it favour a particular kind of water, or is it just rain water? don't know, have always used tap water. It doesn't seem to be fussy.

Any critical temperature requirements? - not that I've noticed.  
Do you add nutrients or fertiliser? - no.  
Does it easily self-seed? - yes.

From Plants For A Future

- Propagation

Seed - best sown as soon as it is ripe in a cold frame in trays standing in shallow water. When they are large enough to handle, prick the seedlings out into individual pots and grow them on in trays of shallow water, planting them out in the summer. Division in spring. Very easy, larger clumps can be replanted direct into their permanent positions, though it is best to pot up smaller clumps and grow them on in a cold frame until they are rooting well. Plant them out in the spring.

- Cultivation

Succeeds in an open sunny position in boggy soils or in still water up to 25cm deep.

### **Conservation information**

*Damasonium alisma* is protected under Schedule 8 of the Wildlife and Countryside Act (1981)

### **Linkages to BAPs**

A Species Action Plan has been produced for *Damasonium alisma*, lead partner Dominic Price, Plantlife  
Tel:01722 342749

The species is recorded in:

Hampshire Biodiversity Partnership

Buckinghamshire and Milton Keynes BAP 2000-2010

Kent BAP

From Rio to Sussex, Action for Biodiversity

### **Habitat Management**

Four of its sites are in SSSIs.

Names of the protected sites are listed on <http://www.searchnbn.net>

### **Conservation programmes**

Several ponds are being restored, and reintroduction has also been attempted.

### **Web References**

- NBN Gateway database: <http://www.searchnbn.net>
- UK Species Action Plan: <http://www.ukbap.org.uk/UKPlans.aspx?ID=256>
- Plants For A Future Database: [http://www.ibiblio.org/pfaf/cgi-bin/arr\\_html?Damasonium+alisma&CAN=LATIND](http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Damasonium+alisma&CAN=LATIND)