

Tassel stonewort (*Tolypella intricata*)

This internationally threatened species is declining throughout most of its range. It is listed as Vulnerable in the British Red Data Book and occurs at one site in Suffolk. It is a member of the Charophyceae (stoneworts), a small class of green algae with complex structures.

1 Current status

1.1 National

The species is restricted to small populations in southern England in Gloucestershire, Worcestershire, Cambridgeshire, Suffolk and Norfolk and is classed as Vulnerable in the British Red Data Book. Since 1970 it has only been found at seven sites (22 waterbodies).

1.2 Local

In Suffolk it occurs only in one small ditch between arable fields at Mickfield.

1.3 Natural Areas

East Anglian Plain.

1.4 Protection

None.

2 Current factors causing loss or decline

The type of habitat required by this species is in decline. Small ponds are still disappearing through neglect or infilling at an alarming rate. It is likely that the species requires fairly heavy poaching around the pond/waterbody to encourage germination. It may also suffer from shade, either directly or due to dense accumulation of leaf litter. Other threats include eutrophication from phosphate leachate from improved grassland, drainage of seasonally inundated grassland and decline in grazing. It is possible that the rarity of this species is a function of poor dispersal capability, rather than specialised ecological requirements.



3 Current action

- It is interesting to note that this species was found at the Mickfield site after a gap of 25 years. It is capable of surviving for some time as dormant buried oospores. These can be stimulated to germinate by poaching or ditch clearance.
- At the Mickfield site the water quality appears to be quite good despite the arable situation. There is a broad rough margin to both parts of the ditch that may help reduce the amount of leachate reaching the water.
- The ditches are normally cleared out every ten years and were last done about six years ago. It is likely that there are dormant oospores over a wider stretch of the ditch and that a larger population will emerge when the ditch is next cleared.

4 Action plan objectives and targets

- 1 *Halt any further decline in the population at the extant site*
- 2 *Designate the site as a County Wildlife Site.*
- 3 *Maintain optimum growing conditions at the site (i.e. keep the ditch cleared out to prevent build up of organic silt and reduce competition.*
- 4 *Persuade the owner to do further clearance to provide information on the extent and strength of the population.*
- 5 *Investigate ditches flowing both east and west from this site to see if there are further populations.*

5 Proposed action with key local partners

ACTION	KEY LOCAL PARTNERS	TIMETABLE				
		2000	2001	2002	2003	2004
A. Policy and Legislation						
No action proposed						
B. Site safeguard and management						
Designate sole site as CWS	SWT, SCC	*	*			
Consult with landowner and undertake further ditch clearance	SWT			*	*	*
C. Species management and protection						
No action proposed						
D. Advisory						
Continue contact with landowner to ensure sympathetic management	Plantlife, BSBI	*	*	*	*	*
E. Future research and monitoring						
Establish optimum conditions for germination and growth of new plants	Plantlife	*	*	*	*	*
Estimate total number of plants every two years	Plantlife	*		*		*
F. Communications and publicity						
Ensure landowner is aware of importance of this site	Plantlife	*	*			