

## NORFOLK BIODIVERSITY ACTION PLAN

### RIBBON-LEAVED WATER-PLANTAIN

#### (*Alisma gramineum*)

An inconspicuous species that occurs sporadically; possibly overlooked, particularly as a submerged aquatic. Recorded from deep to shallow waters in lowland lakes and ditches. Tolerant of eutrophic conditions but intolerant of competition from other vegetation. Germination may be dependent on disturbance. Grows as a deeply submerged perennial, as rosettes with floating and emergent leaves in shallow water and as a terrestrial annual on periodically inundated soils where competition is suppressed. Flowers when submerged or emergent and may produce more than one inflorescence in favourable conditions. Seed may show a capacity for dormancy.

Ref 1/S26	Tranche 1	Species Action Plan 26
Plan Author:	Norfolk Wildlife Trust	
Plan Co-ordinator:	Norfolk Wildlife Trust	
Plan Leader:	Waterbodies Group	
Date:	Stage:	
31 December 1998	Final Draft	
May 2000	Under Review	
December 2000	Under Review	

## 1. CURRENT STATUS

### Legislation

- Ribbon-leaved water-plantain is protected in the UK under Schedule 8 of the Wildlife and Countryside Act 1981.

### National Status

- Nationally-rare. British Red Data Book species (Wigginton 1999).
- Critically endangered (Wigginton 1999).
- First discovered in Britain in 1920 at an artificial lake, Westwood Great Pool. It still persists at this site though plants may fail to appear in some years. The reason for the fluctuations is unknown. Discovered in the River Glen and associated drains, Lincolnshire in 1955.
- Post 1987, confined to two sites: Westwood Great Pool (shallow lake) in Worcestershire and a drainage ditch in Lincolnshire, where it appeared in 1991 and 1992 after clearance; however, it did not survive once *Phragmites australis* recolonised the site (Wigginton 1999).

### Norfolk Status

- Recorded in 1972 on the shores of Langmere, East Wretham Heath, Breckland (Beckett and Bull 1999).
- Now considered to be extinct in Norfolk but may survive as dormant seed.
- Although suggested that East Anglian populations may have been derived from seed carried by wildfowl arriving from Denmark or the Baltic (Libbey and Swann 1973), it may also have been present unnoticed, possibly as a submerged population.

## 2. CURRENT FACTORS CAUSING LOSS OR DECLINE IN NORFOLK

- Recent historic changes in the management of Langmere, ie a cessation of poaching at the margins and a cessation of the practice of ploughing and cropping when dry, may have contributed to the decline and loss.

### **3. CURRENT ACTION IN NORFOLK**

- None, but potential for reintroduction.

### **4. ACTION PLAN OBJECTIVES AND TARGETS**

#### **National**

- Protect extant sites and viable populations.
- Consider reintroduction into former sites.

#### **Norfolk**

- Participate in any reintroduction programme.

## Ribbon-leaved Water-plantain - Norfolk Action Plan

NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
<b>5.1</b>	<b>Policy and Legislation</b>			
<b>5.1.1</b>	Identify water quality requirements at extant sites.	Not applicable.		
<b>5.2</b>	<b>Site Safeguard and Management</b>			
<b>5.2.1</b>	Ensure appropriate management of sites.	Obtain management advice and review management plan at former site, in order to encourage germination from natural seed bank.	NWT/EN	
<b>5.2.2</b>	Research conservation management requirements.	Not applicable.		
<b>5.3</b>	<b>Species Management and Protection</b>			
<b>5.3.1</b>	Collect seed for national seed bank.	Not applicable.		
<b>5.3.2</b>	Encourage germination from natural seed bank.	See 5.2.1.	NWT	
<b>5.3.3</b>	Investigate feasibility of re-establishing at former sites.	Participate in Species Recovery Programme if appropriate.	NWT/EN	
<b>5.4</b>	<b>Advisory</b>			
<b>5.4.1</b>	Ensure key bodies and individuals are aware of conservation needs and legal protection.	See 5.2.1.	EN	
<b>5.5</b>	<b>Future Research and Monitoring</b>			
<b>5.5.1</b>	Not applicable.	Not applicable.		
<b>5.5.2</b>	Survey former sites and assess suitability.	Survey former site at Langmere and assess suitability for reintroduction.	EN/NWT	
<b>5.5.3</b>	Promote ecological research.	Not applicable.		

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NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
<b>5.5.4</b>	Encourage European research.	Not applicable.	NWT	
<b>5.5.5</b>	Pass data to Joint Nature Conservation Committee/Biological Records Centre.	Monitor any introduction as part of management plan for site and inform Joint Nature Conservation Committee/Biological Records Centre and/or Norfolk Biological Records Centre.		
<b>5.5.6</b>	Not applicable.	Not applicable.		
<b>5.6</b>	<b>Communications and Publicity</b>			
<b>5.6.1</b>	None proposed.	Not applicable.		

## MANAGEMENT GUIDANCE

(This guidance is a general summary; for detailed information or advice consult the references or contacts below.)

Germination may be dependent on disturbance.

## CONTACTS

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## KEY REFERENCES

Beckett, G and Bull, A (1999) A flora of Norfolk. Norfolk: Gillian Beckett.

Chatters, C (1996) Conserving rare plants in muddy places. *British Wildlife* 7(5): 281-286.

Libbey, R P and Swann, E L (1973) *Alisma gramineum*: a new county record. *Nature in Cambridgeshire* 16: 39-41.

Wigginton, M J (Ed) (1999) British Red Data Books 1: Vascular plants. Third edition. Peterborough: Joint Nature Conservation Committee.

## PROGRESS ON PLAN ACTIONS (as at 27/02/01)

	<b>Norfolk Action</b>	<b>Comments</b>
5.1.1	Not applicable.	
5.2.1	Obtain management advice and review management plan at former site, in order to encourage germination from natural seed bank.	In progress. A more detailed approach is required. Some form of brief report (from TP) would provide useful guidance.
5.2.2	Not applicable.	
5.3.1	Not applicable.	
5.3.2	See 5.2.1.	
5.3.3	Participate in Species Recovery Programme if appropriate.	
5.4.1	See 5.2.1.	
5.5.1	Not applicable.	
5.5.2	Survey former site at Langmere and assess suitability for reintroduction.	Survey completed. BN to meet TP in autumn 2001 regarding potential of site for reintroduction.
5.5.3	Not applicable.	
5.5.4	Not applicable.	
5.5.5	Monitor any introduction as part of management plan for site and inform Joint Nature Conservation Committee/Biological Records Centre and/or Norfolk Biological Records Centre.	
5.5.6	Not applicable.	
5.6.1	Not applicable.	

## PROGRESS ON PLAN OBJECTIVES AND TARGETS