

## NORFOLK BIODIVERSITY ACTION PLAN

### DESMOULIN'S WHORL SNAIL

#### (*Vertigo moulinsiana*)

A very small, 2.2-2.7mm, snail that lives on tall swamp vegetation in summer such as sedges, reeds and reed sweet-grass in wet situations. It is not an aquatic species.

Ref 1/S17	Tranche 1	Species Action Plan 17
Plan Author:	Dr Roy Baker	
Plan Co-ordinator:	English Nature	
Plan Leader:	Waterbodies Group	
Date:	Stage:	
31 December 1998	Final Draft	
December 2000	Under Review	

## 1. CURRENT STATUS

### National Status

- In the UK, Desmoulin's whorl snail is known from a series of sites stretching in a broad band from Dorset to Norfolk. This snail is listed on Annex II of the EC Habitats Directive, and is listed as rare in the GB Red List.

### Norfolk Status

- Present within fen sites in the Yare, Ant and Bure valleys in the Broads Natural Area. Also sites within the river Nar valley (West Acre, Castle Acre and nearby East Walton and Adcocks Common), Glandford on the river Glaven and the Upper Wensum (Shereford, Hempton and Guist) within the North Norfolk Natural Area and Thompson Common in the Brecks Natural Area.

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

- Destruction of wetlands. Habitat degradation, particularly as a result of changes in hydrology and possibly the introduction of grazing.

## 3. CURRENT ACTION IN NORFOLK

- Desmoulin's whorl snail is one of the 'interest features' of The Broads candidate Special Area of Conservation (cSAC), the Norfolk Valley Fens cSAC and the River Wensum cSAC. Works associated with the Fen Management Strategy in the Broads and other fen restoration effort will continue to increase the extent of suitable habitat and bring it into sustainable management.

## 4. ACTION PLAN OBJECTIVES AND TARGETS

### National

- Maintain viable populations of snail across its current range to ensure favourable status.
- Survey to determine the full extent of the snail's current distribution and precise habitat requirements.

### Norfolk

- Maintain viable populations within the fens of the Yare, Bure and Ant valleys in the Broads. Also those present on the rivers Nar, Wensum and Glaven and Thompson Common in the Brecks.

## Desmoulin's Whorl Snail - Norfolk Action Plan

NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
<b>5.1</b>	<b>Policy and Legislation</b>			
<b>5.1.1</b>	Consider providing incentives for wetland management and restoration under appropriate agri-environment programmes in areas where the snail occurs, particularly where such incentives could contribute to the maintenance and restoration of water quality and quantity.	Ensure that prescriptions in the Broads Environmentally Sensitive Area and Countryside Stewardship schemes will be beneficial to this species.	EN DEFRA (RDS)	
<b>5.1.2</b>	Ensure the requirements of this species are taken into account when considering any possible extension of Environmentally Sensitive Areas to cover marshes containing occupied water courses.	Ensure the boundaries and targeting of agri-environment schemes benefit this species.	DEFRA (RDS)	
<b>5.1.3</b>	Seek to ensure that local flood defence activities and Water Level Management Plans take account the requirements of this species.	Seek to ensure that the Broads Flood Alleviation Strategy and the River Nar and River Wensum Water Level Management Plans take account the requirements of this species.	EA, River Nar IDB, River Wensum IDB, BA	
<b>5.2</b>	<b>Site Safeguard and Management</b>			
<b>5.2.1</b>	Seek to ensure that local water abstraction policies take account of the need to protect the snail.	Seek to ensure that local water abstraction policies take account of the need to protect the snail. Of particular relevance is the Environment Agency's review of existing consents that could be affecting sites of European importance (Special Areas of Conservation and Special Protection Areas).	EA, EN	

## Desmoulin's Whorl Snail - Norfolk Action Plan

NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
<b>5.2.2</b>	Encourage the sympathetic management of occupied wetland sites.	Implement appropriate management of occupied wetland sites as knowledge of its requirements is gained from national and local research.	EN, DEFRA (RDS), EA, IDBs, FWAG, Wensum Valley Project	Site Owners and Managers
<b>5.4</b> <b>5.4.1</b>	<b>Advisory</b> Ensure landowners and managers are aware of the presence and importance of conserving this snail, and appropriate methods of habitat management for its conservation.	Ensure landowners and managers are aware of the presence and importance of conserving this snail, and appropriate methods of habitat management for its conservation.	EN, DEFRA (RDS), IDBs, FWAG, Wensum Valley Project	Site Owners and Managers, Drainage Contractors
<b>5.5</b> <b>5.5.1</b>	<b>Future Research and Monitoring</b> Undertake further surveys in selected areas to clarify current distribution.	Undertake further surveys to clarify Norfolk distribution.  Collate all known distribution data.	EN, Dr Roy Baker  EN/NBRC	
<b>5.5.2</b>	Promote ecological research to determine habitat requirements more fully, to inform management advice.			
<b>5.5.3</b>	Pass information gathered during survey and monitoring of this species to Joint Nature Conservation Committee or Biological Records Centre so that it can be incorporated in national databases.	Pass information gathered during survey and monitoring of this species to Joint Nature Conservation Committee or Biological Records Centre and Norfolk Biological Records Centre so that it can be incorporated in national and local databases.	EN	NBRC
<b>5.5.4</b>	Provide information			

## Desmoulin's Whorl Snail - Norfolk Action Plan

NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
	annually to the World Conservation Monitoring Centre of the UK status of the species to contribute to maintenance of an up-to-date global Red Data List.			

### NORFOLK DISTRIBUTION

(to be mapped)

### MANAGEMENT GUIDANCE

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

Desmoulin's whorl snail occurs in long-established swamps, fens and marshes usually bordering rivers or lakes, living on stems and leaves of tall grasses, sedges and reeds, probably over-wintering in plant litter. Inhabited plants usually stand in shallow water or on humid, damp ground and the snail shuns dry fen; the snail will disappear from areas where conditions become dry enough for plants such as common nettle and great willowherb to become frequent.

- The groundwater level must remain close to the surface so that the ground remains at least moist for the majority of the summer period, although limited seasonal drying appears to be tolerated.
- Conversely, conditions must not become so wet that aquatic plants such as water-cress and fool's-water-cress take over.
- Ideally there should be no grazing by domestic livestock. Heavy trampling will eradicate the snail and management that reduces or removes tall grasses and sedges is detrimental.
- Regular cutting or mowing removes tall vegetation that the snail requires.
- The snail is able to tolerate low intensity, patchy grazing and infrequent cutting although tidy riverbanks will eradicate the snail.
- It has a strong preference for open, unshaded situations although it can tolerate light shade. Scrub, tall trees and tall reed that cast deeper shade are inappropriate and scrub on fens may also result in drying out during summer.
- It is crucial that sites have areas of fen or reed on higher ground to provide refuges when rivers are in flood, as adults floated out of riparian 'hover' during winter flooding do not survive.
- The snail occurs less frequently on common reed, so management that encourages

this plant should not be adopted where there is a good population of the snail.

- It has recently been discovered that the snail will occupy and breed readily in translocated and newly-created marsh.

## CONTACTS

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## REFERENCES

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

	Norfolk Action	Comments
5.1.1	<p>Ensure that prescriptions in the Broads Environmentally Sensitive Area and Countryside Stewardship schemes will be beneficial to this species.</p> <p>Ensure the boundaries and targetting of agri-environment schemes benefit this species.</p>	<p>Requirements of this species will be taken into account by the Broads ESA Review Group when considering management prescriptions (Broads ESA Review Group).</p> <p>River Wensum cSAC designated in March 2001 with Desmoulin's at European interest feature.</p>
5.1.3	<p>Seek to ensure that the Broads Flood Alleviation Strategy and the River Nar and River Wensum Water Level Management Plans take account the requirements of this species.</p>	<p>KLCIDB flood defence works considered needs of snail.</p> <p>EA's Minimum Environmental Standards and KLCIDB Standard Maintenance Operations ensure that margins are retained where possible to protect riparian habitat for snails.</p>
5.2.1	<p>Seek to ensure that local water abstraction policies take account of the need to protect the snail. Of particular relevance is the Environment Agency's review of existing consents that could be affecting sites of European importance (Special Areas of Conservation and Special Protection Areas).</p>	<p>1994 Conservation Regulations are applied to all new abstractions potentially affecting Natura 2000 sites where the snail is a European feature. Impacts of proposed abstractions affecting snail populations in other sites will be subject to an appropriate level of environmental assessment. Review of existing consents is ongoing (due for completion by 2010). (EA)</p>
5.2.2	<p>Implement appropriate management of occupied wetland sites as knowledge of its requirements is gained from national and local research.</p>	<p>Management Plan for Guist Common (which forms part of the River Wensum cSAC), written in 2000, takes account of the requirements of Desmoulin's snail (EA, EN, NCC, Wensum Valley Project).</p>
5.4.1	<p>Ensure landowners and managers are aware of the presence and importance of conserving this snail, and appropriate methods of habitat management for its conservation.</p>	<p>Owners and managers of Guist Common made aware of importance of site for Desmoulin's snail through production and implementation of management plan (EA/EN/Trustees of Guist Common/Wensum Valley Project).</p>

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	<b>Norfolk Action</b>	<b>Comments</b>
5.5.1	Undertake further surveys to clarify Norfolk distribution.	<p>Survey of Guist Common by Jackson and Howlett in 1999 confirmed presence of species at seven sampling locations within the site (survey funded by EA/EN/Breckland Council and Wensum Valley Project).</p> <p>Survey of seven localities in Upper Wensum Valley by Jackson and Howlett in 1999 confirmed presence of the species at Hempton (survey funded by EA).</p> <p>Survey of additional sites in River Wensum cSAC undertaken in 2000/2001 (funded by EN).</p>
	Collate all known distribution data.	<p>BA survey of Heron's Carr, Barton in August 2000.</p> <p>Other surveys?</p>
5.5.3	Pass information gathered during survey and monitoring of this species to Joint Nature Conservation Committee or Biological Records Centre and Norfolk Biological Records Centre so that it can be incorporated in national and local databases.	Records from Upper Wensum and Guist surveys have been passed to Norfolk Biological Records Centre. (EA)

## **PROGRESS ON PLAN OBJECTIVES AND TARGETS**