

The elusive mud snail, *Omphiscola glabra*



Dr Maria Long
John Brophy MSc
With assistance from
Dr Roy Anderson

Description:

- Tall-spined
- Dull brown in colour
- Aperture (mouth) small
 - only $\frac{1}{3}$ height of shell
- Slight barrelling – lower whorls almost cylindrical

- **Whorls** moderately convex, with fairly shallow sutures

- **Surface** almost matt, with very fine striae

H: 9-15(20)mm

W: 3-6mm



Habitats and Ecology:

- Restricted to nutrient-poor, sometimes temporary, aquatic habitats in lowland areas
- Often not of obvious conservation value, with few other animal or plant species

e.g. ditches, marshes, small ponds (sometimes in woodland), seepages, etc.

- Can burrow into soft mud



Photos:

Top - Baker, Paul. Action Plan for the Mud Snail (Macadam & Baker, 2005)
Bottom - Killeen, Ian (2008) A survey to determine the present status of the mud snail *Omphiscola glabra* at sites in County Durham. Northumbrian Water.

Most recent Irish sites:

2009: Spring-fed acid wetland, at bases of *Menyanthes trifoliata* (bog-bean)



1979: Drain at edge of arable field, in landscape consisting mainly of heath & forestry plantations

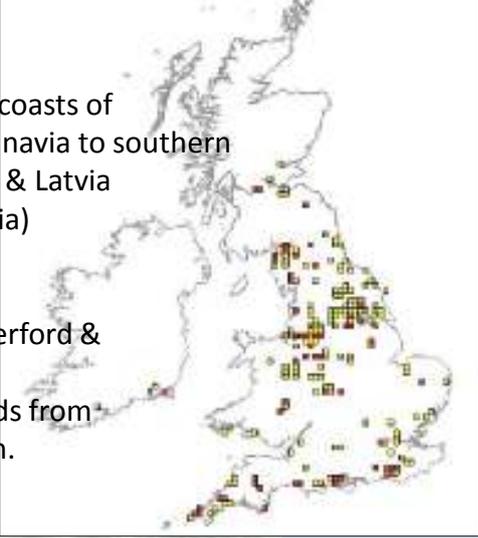
Distribution:

International:

- Range extends along Atlantic coasts of Europe, from southern Scandinavia to southern Spain, and inland to Germany & Latvia (extinct in Poland, not in Russia)

National:

- Confirmed sites in Cork, Waterford & Wexford.
- Unconfirmed/doubtful records from Roscommon, Clare and Cavan.

NBN map, taken from: Killeen, Ian (2008) A survey to determine the present status of the mud snail *Omphiscola glabra* at sites in County Durham. Northumbrian Water.

Confirmed Irish records:

Pre-1900:

- 1840; Cork; John Humphreys
- 1886; Cork; W.H. Evans
- Pre-1895; Cork; Lord de Tabley

Early 1900s:

- 1928; Ballymacar, east of New Ross; Geraldine Roche

Recent:

- 1979; Shelmaliere, west of Wexford town; James Hurley [wiped out 1980]
- 2009; Carrickavrantry, south of Waterford city; Roy Anderson & Stephen McCormack



Conservation status

Irish Red Data List (Byrne et al., 2009):

- Classified as 'Regionally Extinct' (**RE**)
- Revised status of:
 'Critically Endangered' (**CR**)

IUCN list:

- 'Near threatened' (↓ 25%)
- Regional declines evident, due to continuing habitat loss

UK situation:

- 'Vulnerable', 'Priority species'
- Formerly widespread across acidic lowland – now extinct over large areas (↓ 60%)



- Byrne, A., E. A. Moorkens, et al. (2009). Ireland Red List No. 2 - Non-Marine Molluscs, National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. (Download from www.npws.ie)
- <http://www.iucnredlist.org/> - <http://data.nbn.org.uk/>

Threats:

- Habitat destruction/change
 - Agricultural drainage
- Eutrophication

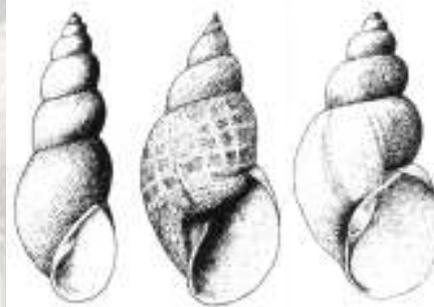
Loss of Shelmaliere site within a year of it's discovery!



www.epa.ie

Challenges for conservation:

- Identification
- Burrowing behaviour
- Precariousness of habitats –
 - small
 - temporary
 - vulnerable to change
- Lack of recognition of habitats
 - often not of obvious conservation value, therefore overlooked??
- Challenging nature of the habitats for surveying
- Population fluctuations?



Omphiscola glabra *Lymnaea palustris* *Galba truncatula*

Drawings sourced from Action Plan for the Mud Snail (MacAdam and Baker, 2005), Reproduced there from Kerney (1999)

Where to from here? – prospects for the species

NPWS-funded survey 2012:

1. Brierfield turlough, Roscommon
 2. Carrickavrantry, Waterford
- ⇒ Both negative

Possibly buried at Carrickavrantry?

High conservation value
- needs protection

Other potential sites in south & east should be visited – may be small, not of apparent interest

May also occur in very small habitats on the margins of larger acid wetlands

Brierfield



Carrickavrantry



Thanks to:

NPWS (particularly Dr Brian Nelson) (www.npws.ie)

BEC Consultants (www.botanicalenvironmental.com)

Dr Roy Anderson, and Molluscireland (<http://www.habitas.org.uk/molluscireland/index.html>)

NBDC (particularly Dr Eugenie Regan) (www.biodiversityireland.ie)

Dr Stephen McCormack

Dr Gwen Porst and Dr Nova Sharkey, Trinity College Dublin

