

Whorl Snails (*Vertigo alpestris* & *Vertigo pusilla*)



A Vertigo Snail
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The limestone area inland of Morecambe Bay is a national stronghold for two species of 'whorl' snails: The 'mountain whorl snail' (*Vertigo alpestris*) and the 'wall whorl snail' (*Vertigo pusilla*).

Both species are small with cylindrically shaped, squat spiral shells, about 2 mm high and 1 mm in width. Each species of whorl snail has its own characteristic pattern of 'teeth' inside the opening of the shell. The two species can be told apart also by the direction in which the shell spirals. *Vertigo pusilla* is a 'sinistral' snail, meaning that the shell's opening is on the left side when viewed face-on. *Vertigo alpestris* is 'dextral', with the opening on the right.

Lightly shaded, ivy-covered drystone walls are a favoured habitat of both species and there is concern that unsympathetic restoration of old walls could lead to the loss of important populations. In warm and damp weather conditions, a careful search in leaf litter and debris between stones or at the foot of the wall will usually reveal the presence of these species if they occur. Limestone pavement provides another habitat.

A rarer third species, the narrow-mouthed whorl snail (*Vertigo angustior*), occurs at Gait Barrows NNR. It is addressed in the limestone pavement HAP.

Main Habitat(s): Lightly shaded drystone walls made from limestone rocks; limestone pavement; undisturbed, grassy banks.

National Status

Both species are classified as 'nationally scarce'.

The distribution of *V. pusilla* is scattered and very local throughout Britain. There is evidence that it is declining, at least in southern England.

V. alpestris is almost confined to limestone areas of northern England, with a very few colonies in Wales.

Regional Status

North West England supports the best colonies of *V. pusilla* and *V. alpestris* in the country, and there is little evidence of recent decline here.

Local Status

Arnside/Silverdale is thought to support a nationally significant population of *V. pusilla*.

A small population of *V. alpestris* exists in the area of Silverdale but its size and extent is uncertain at present.

V. pusilla is found at Gait Barrows NNR, Warton Crag (Nature Reserve and Occupation Road), Thrang End and Yealand Hall Allotments in limestone grassland and pavement. It is widespread in the Silverdale area in suitable ivy-covered walls. It has also been recorded at Wray in an ivy-clad sandstone wall.

V. alpestris is possibly at Gait Barrow and Eaves Wood, although there are no confirmed recent records. It is present in walls at Leighton Moss and probably in small numbers elsewhere in Silverdale.

Current factors affecting the Species

Debris under ivy-clad walls is the best habitat, and clearance and rebuilding of ivy covered walls is a serious threat to both species.

The species need a degree of shading but light shade by ash is preferable to the development of dense woodland canopies over drystone wall or limestone grassland habitats.

Current Action / Mechanisms

UK BAP plans exist for several whorl snail species but not for *Vertigo alpestris* nor for *Vertigo pusilla*. However, the UK BAP process has brought together a group of experts at a national level to co-ordinate *Vertigo* snail conservation.

The Arnside/Silverdale Area of Outstanding Natural Beauty (AONB) covers much of the area known to be inhabited by these snails in Lancashire. The AONB Countryside Management Service is awaiting confirmation of substantial Heritage Lottery funding, part of which, if the bid is successful, will be ear-marked for drystone wall repair.

Guideline Mo2 in the Biological Heritage Sites (BHS) Guidelines makes it possible that non-statutory wildlife sites can be designated in the county where populations of either species are found. BHSs are recognised within the statutory land-use planning system and are used by MAFF to target Countryside Stewardship.

Objectives, targets and proposed actions for whorl snails in Lancashire

Broad Objective:	A. Identify key sites for <i>Vertigo alpestris</i> and <i>Vertigo pusilla</i>.
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Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Establish location of important populations of the species.	1. In 2000/1 survey as much as possible of the drystone wall resource in the Arnside/Silverdale AONB to identify walls supporting populations of either species, prioritising those walls that are scheduled to be restored with HLF funding. (High)	WT, AONB, NLN	S	RM
	2. Extend survey for both species to cover walls in areas around Kirkby Lonsdale, Cowan Bridge and Leck Fell and, in addition, for <i>V. pusilla</i> into the Forest of Bowland. (Medium)	NLN, WT	M	RM
Broad Objective:	B. Maintain viable populations at all key sites			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Enlist support to ensure that restoration of old drystone walls does not lead to the loss of important populations.	1. Produce best practice guidance targeted at landowners and drystone wall builders to encourage retention of ivy-covered sections of wall should the species be found. (If they are present, only limited sections of the wall should be repaired at one time). (High)	AONB (CMS), WT, NLN	S	A, LM
2. Seek to protect important populations from adverse impacts due to development.	1. Identify and designate as BHSs by 2002 all sites that are eligible on basis of presence of a population of either species. (High)	LCC	S	SS
	2. Ensure that all relevant Local Authorities are aware of BHSs for whorl snails in their area and have local plan policies that safeguard these sites. (High)	Lancaster CC	S	SS

Broad Objective:	C. Increase public awareness of the importance of old drystone walls for their wildlife, cultural and historical value.			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Produce materials showing the whorl snails (and other species of stone walls).	1. Produce and distribute a leaflet among relevant landowners, drystone wallers and the wider public (Medium).	AONB (CMS), LWT, NLN	S	PR

Related Action Plans:

- Limestone pavement HAP

References & additional reading:

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6. Pokryszko, B.M. (1990) The Vertiginidae of Poland (Gastropoda: Pulmonata: Pupilloidea) – a systematic monograph. *Annales Zoologici, Warsaw*, 43:134 –257.

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