

# LOWER WINDRUSH VALLEY

## Conchological Society Meeting 17 July 2004.

*David Long and Rosemary Hill*

Society members met Alison Hopewell, the Project Officer for the Lower Windrush Valley Project, at the Linch Hill Leisure Park (SP 417040) on a pleasant but comfortable day and visited three flooded gravel pit lakes. Gravel extraction here began in the 1960s, which puts an approximate start date on colonisation by plants and animals.

The pits were excavated in Pleistocene sands and gravels mainly derived from the Jurassic limestones of the Cotswolds, and rest on impervious Late Jurassic Oxford Clay. The environment is generally calcareous.

All three pits examined - Stoneacres Lake, Willow Lake and Christchurch Lake are

used for coarse fishing and also have large waterfowl populations. The pits are open with about two metres of shallow edge followed by a steep drop. There is a narrow wetland fringe with varying heights of vegetation.

Twenty-three species of aquatic molluscs were found (details in table).

Species	Vernacular	Stoneacres	Willow	Christchurch
<i>Valvata piscinalis</i>	Common valve snail	Live		
<i>Potamopyrgus antipodarum</i>	Jenkins Spire Snail	Common	Live	
<i>Bithynia tentaculata</i>	Common Bithynia	Live	Live	
<i>Bithynia leachii</i>	Leach's Bithynia		Old shell	
<i>Physa fontinalis</i>	Bladder snail	Shell		
<i>Physella</i> sp ( <i>cf acuta</i> )	"Bladder Snail"		Shell	Live
<i>Lymnaea palustris agg</i>	Marsh Pond snail	Fresh shells		
<i>Lymnaea stagnalis</i>	Great Pond Snail			Live
<i>Lymnaea auricularia</i>	Ear Pond Snail	Shell	Live	
<i>Lymnaea peregra</i>	Common Pond Snail			Live
<i>Lymnaea truncatula</i>	Dwarf pond snail	Live		
<i>Planorbis planorbis</i>	Margined ram's-horn	Shell		Live
<i>Planorbis carinatus</i>	Keeled ram's-horn	Shell		Live
<i>Gyraulus albus</i>	White ram's horn			Live
<i>Anodonta cygnea</i>	Swan mussel		Shell	
<i>Sphaerium corneum</i>	Horny orb mussel	Live		
<i>Musculium lacustre</i>	Lake orb mussel	Fresh shell		
<i>Pisidium casertanum</i>	Caserta "Pea mussel"	Live		
<i>Pisidium milium</i>	Quadrangular "Pea mussel"	Live		
<i>Pisidium subtruncatum</i>	Truncated "Pea mussel"	Shell		
<i>Pisidium henslowanum</i>	Henslow's "Pea mussel"	Live	Live	
<i>Pisidium nitidum</i>	Shiny "Pea mussel"	Live	Live	
<i>Dreissena polymorpha</i>	Zebra mussel		Live	

The fauna found was diverse, but numbers of animals were generally low, especially species which are associated with aquatic vegetation, rather than bottom sediments. Each pit examined had species not found in the other two. A sample (c.0.5kg) of

sand and gravel from a vegetation free bottom at the edge of Stoneacres (in course of examination) had large numbers of *Potamopyrgus antipodarum* and pea mussels (*Pisidium* spp).

Willow Lake, which has more trees surrounding it, has more rotting vegetation on the bottom than Stoneacres. It was the only pit where zebra mussels (*Dreissena polymorpha*) were found; they were present in large numbers on

submerged wood, stones and other objects; it was also the only pit to produce Swan mussels (*Anodonta cygnea*) on this occasion.

Christchurch Lake had had barley straw dumped in it to suppress weed growth, and was also receiving water from an adjacent pit which was being landscaped, so the water level was raised. We did not record any bottom-dwelling molluscs from this site. Most of the snails recorded here were among weed or semi-submerged thistles and reed mace.

Eighteen species of land molluscs were found (details in table below).

Because we concentrated on the aquatic fauna the search for land molluscs was limited. There were no extensive areas of fen, but there was a narrow wet fringe to the lakes and here some species typical of such habitats were found: *Carychium minimum*, *Oxyloma pfeifferi*, *Vallonia pulchella*, *Zonitoides nitidus*, and *Deroceras laeve*, mostly on decaying *Juncus* stems, but *Z. nitidus* was also on

rotting drifted vegetation at the edge of Stoneacres.

Two species characteristic of short lime-rich turf were associated with short mossy vegetation containing wild basil (*Clinopodium vulgare*) at the edge of Christchurch Lake - *Pupilla muscorum*, and *Vallonia excentrica*.

With many thanks to Alison Hopewell for organising this interesting visit and for the permission given by the landowners and angling clubs.

Species	Vernacular	Stoneacres	Willow	Christchurch
<i>Carychium minimum</i>	Herald snail	Live		
<i>Carychium tridentatum</i>	Slender herald snail		Shell	
<i>Oxyloma pfeifferi</i>	Pfeiffer's amber snail		Live	
<i>Cochlicopa lubrica</i>	Slippery moss snail	Live		Live
<i>Pupilla muscorum</i>	Moss chrysalis snail			Live
<i>Vallonia pulchella</i>	Smooth grass snail		Live	
<i>Vallonia excentrica</i>	Excentric grass snail			Shell
<i>Arion intermedius</i>	Hedgehog slug	Live		Live
<i>Nesovitrea hammonis</i>	Raved glass snail	Live	Shell	
<i>Oxychilus cellarius</i>	Cellar snail	Live		
<i>Zonitoides nitidus</i>	Shiny glass snail	Live		
<i>Deroceras laeve</i>	Marsh slug	Live		
<i>Deroceras reticulatum</i>	Field slug	Live		
<i>Monacha cantiana</i>	Kentish snail	Shells		
<i>Trichia striolata</i>	Strawberry snail	Live		
<i>Trichia hispida</i>	Hairy Snail	Shells	Live	
<i>Cepaea hortensis</i>	White-lipped snail	Live		
<i>Cepaea nemoralis</i>	Brown-lipped snail		Live	