Molluscs and Riffle Beetle *Macronychus quadrituberculatus* River Severn, Yew View, Clevelode, Worcestershire, 1st August 2015

## Will Watson

At Yew View there are three landing stages enabling access to the River Severn. One always approaches the river with an air of trepidation because the sludgy river margins can entrap the unwary and the sides of the river where the mussels are always found plunge down for several metres at a 60 degree angle. Luckily we could see from the landing stages that there was at least several metres of soft silt by the bank before it edged off into the deep water. At the first landing stage I found Painter's Mussels Unio pictorum and the Nut Orb Mussel Sphaerium rivicola as predicted by scooping up large volumes of silt on the edge of the main channel. There appeared to be about one mussel every 0.5 metres along the edge. Unfortunately a speeding motor cruiser then went by sending a tidal wave into the bank just before I managed to net beneath the overhanging vegetation. Even after waiting 10 minutes I could find nothing in this normally reliable habitat. Fortunately under the next landing stage there were several largish submerged dead branches. These were well rotted and supported freshwater sponges, algae and bryozoa. I was delighted to see three species of mollusc attached to them: the ubiquitous Jenkins' spire snail Potamopyrgus antipodarum, the River Nerite Theodoxus fluviatilis and the Common River Snail Viviparus viviparous. Actually the later two species are now not so common. On previous occasions whilst carrying out surveys in the Severn we have found only abandoned shells rather than occupied shells. It is pleasing to know they are still present in the Severn below Worcester.



01. River Nerite Theodoxus fluviatilis very clearly alive!.Will Watson



02. River Nerite *Theodoxus fluviatilis* carrying eggs on its shell. Will Watson



03. A Common River Snail *Viviparus viviparous* showing its operculum. Will Watson

Even more exciting however, was the appearance of a small riffle beetle clambering over the wood. I knew it was not one of the common riffle beetles and it turned out to be, with thanks to Professor Garth Foster's ID skills; *Macronychus quadrituberculatus* Müller. Its status is IUCN Lower risk - near threatened. *M. quadrituberculatus* is a lowland species, usually found clinging to submerged tree trunks in deep, permanent water in rivers. It is described as a western European species reaching as far as Morocco, the Central Russian steppe and Hungary, absent in Denmark, Norway and Sweden, but found in Finland and the Baltic States (Foster 2010). In Britain its stronghold appears to be the River Severn in Shropshire and Worcestershire. Picture (04) shows the specimen on wood; Pictures (05) is from *Iconographia Coleoperotom Polonoae* © Lech Borowiec



04. Macronychus quadrituberculatus specimen on wood. Will Watson

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## References

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## Images

01. River Nerite *Theodoxus fluviatilis* very clearly alive!.Will Watson 02. River Nerite *Theodoxus fluviatilis* carrying eggs on its shell. Will Watson

03. A Common River Snail Viviparus viviparous showing its

operculum. Will Watson

04. Macronychus quadrituberculatus specimen on wood. Will Watson

05. Macronychus quadrituberculatus drawing