Aquilina Environmental Quality

2016 Newsletter

Medicinal leech in the New Forest

Surveys over the spring and summer at the last four known ponds in the New Forest produced good numbers of Medicinal leech *Hirudo medicianlis*, for two of the ponds, moderate numbers for one and none at all for the fourth site which has become heavily infested with *Crassula helmsii*, the New Zealand Swampcress.

There were 20 or so sites with historical records up to 1980s and the significant decline is reflected across the country, as the Freshwater Habitats Trust surveys have shown. The cause is believed to be the use of anti-worming agents in grazing animals which are passed in dung and are known to cause negative effects on the whole of the dung insect community.

Animals in the open Forest can often dung near or in ponds where leeches appear to be particularly sensitive. Other factors that may be important are the reduction in grazing – so less animals to feed on – although a secondary consequence is the scrubbing up and therefore shading of ponds. Medicinal leech need a water temperature of 20C to breed successfully and so shade is undesirable. A further requirement appears to be the presence

Stanpit Marsh revisited

A 2003 survey by Ann Blofield was repeated in order to track any changes to this, my local grazing marsh. The results were interesting because it gave hints that the marsh was becoming less brackish although further work in 2017 is needed to confirm this. Among the more interesting finds were a couple of water beetles *Ochthebius marinus* and *O. punctatus* which are rather local.

The other nice find was of the Mouse-eared snail, *Ovatella myosotis,* which is not rare but I had never seen before.

of amphibians as a host for the earliest leech life history stages which are too small to feed on mammals. This complicated picture of our rarest leech is slowly being unravelled.

Southern damselfly

A colony of the Southern damselfly, *Coenagrion mercuriale*, was discovered a couple of years ago on the River Mude, Christchurch in what was thought to be very atypical habitat for this rare damselfly. Surveys over June and July gave over a hundred sightings along just a few kilometres of the stream where it was the only blue damselfly present. This lack of competition may well be the reason for its presence in this otherwise ordinary stream. More detailed larval searches are planned for next season, in order to gain information on habitat requirements and use.

Conservation assessments

The bulk of my work consists of conservation assessments which range from highly impacted village ponds to really high quality grazing marshes at Joyce Green, Dartford which were rich in invertebrates, including breeding Hairy dragonfly population and the RDB water beetle *Hydrochus elongates*, as well as water vole and good aquatic plant diversity including the less common Whorled water milfoil, *Myriophyllum verticillatum*. PondNet training courses were presented at some great sites in Wales this year including Magor Marshes, National Botanic Gardens and Brecon.