

ICENI microscope study group meeting Saturday 7 September

The meeting, organised by Geoff Phillips and Chris Adams, focussed on freshwater organisms. Samples of plankton collected from South Walsham Broad and some local ponds, together with invertebrate samples from the Rivers Wensum and Waveney, by Chris the previous day were available for examination.

One purpose of the meeting was to introduce members to the use of aqueous mountants, and several members experimented with using Pritt 5, a mountant invented by the late Ernie Ives (see below), while Peter used Brunel aqueous mountant. The other task was to perfect trapping small mobile animals using a technique that Chris and Geoff had been introduced to at the Quekett Dale Fort meeting by Wim Egmond. This uses a small dab of vaseline on each corner of a square cover slip which is subsequently lowered on to a drop of water containing the specimen on a slide. Careful pressure then slowly lowers the coverslip to a point which then prevents movement.



Chris placing a dab of Vaseline on each corner of the cover slip, then lowering the cover slip on to a slide containing a specimen



And applying gentle pressure to trap the specimen

An example of the saucer bug (*Aphelocheirus aestivalis*) and mosquito larvae (*Culicidae*), both taken using dark ground with a Chinese inspection microscope.



The plankton samples were dominated by blue-green algae (cyanobacteria) mostly *Microcystis*, but zooplankton (*Bosmina* and several rotifers) were observed. An interesting technique was tried by Andy, who dried a plankton sample and then mounted in Pritt 5. Chris subsequently tried this and found a good example of an early stage of *Pediastrum* and a *Microcystis* colony and a rotifer. (pictures below taken using DIC on an Olympus BHA microscope 40x).

Perhaps the method works best with specimens that have a hard lorica !

How well the slide will last remains to be seen.

Pritt 5 Formula (Ernie Ives)

Pritt PVA glue	30 ml
Lactic acid 80%	15 ml
Glycerine	1.5 ml
Industrial methylates spirit 99%	7.5ml



Another example of a rotifer, found on the same slide