A SIMPLE SHINGLE TRAP FOR MYRIAPODS

A.D. Barber
Plymouth College of Further Education, Devonport, Plymouth, PL1 5QG

Sampling for Isopoda and Myriapods in beach shingle is complicated by the nature of the substrate and favoured techniques include hand searching or sieving. The fact that the animals can be 20 or more centimetres deep in loose substrate during the day, coupled by the coloration, particulate nature, and looseness of the substrate makes small, pale arthropods especially difficult to find. Pitfall trapping has been used with some success and led, for instance, to the discovery of the diplodop Thalassisobates littoralis at Slapton, South Devon and elsewhere (Harding, 1985).

A trap as described below was devised in an attempt to see if an “in shingle” device might prove appropriate for the capture of isopods and myriapods. On testing this at Slapton, in a shingle area similar to that sampled by Harding, during May 1996, more than a dozen living specimens of Thalassisobates were collected suggesting that the idea is one that could be used with possible success elsewhere although no further tests have so far been carried out.

The device is a wire cage with plastic capped ends derived from a bird feeder purchased cheaply from a local shop. The particular type used was approximately 18cm long by 6.5cm diameter with a mesh size of approx. 7mm with 16mm long caps. It is held together by a simple rubber band. The handle and bird perch were discarded. No further modifications were made.

The trap was loaded with torn up kitchen tissue and some cut pieces of potato to provide moisture and assist in trapping the animals. It was buried horizontally approximately 0.5m deep in shingle ensuring that it was surrounded by generally larger pebbles that would not go through the mesh and attached to brightly coloured plastic twine which, being arranged so as to reach the surface made locating the trap for examination easier. To prevent human interference in the area concerned the twine was then hidden under a moderately conspicuous larger stone.

Traps were lifted after a week. They were found to contain a quantity of smaller stones and be apparently empty apart from one dead earwig (Forficula sp.) but were transferred to polythene bags for later examination. When emptied into a suitable white tray, one of the three samples was found to contain two specimens of Thalassisobates and another more than a dozen, all alive and very active.

Although this does not represent a new record for this particular site, it would obviously be worth trying the technique elsewhere.
Figures 1-2 Shingle trap for diploponds and isopods 1) Design 2) In use.
Scale bars = 5cm.

REFERENCE