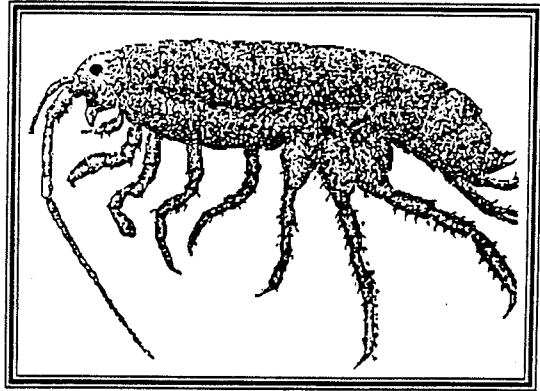


# ARCITALITRUS OUR ANTIPODEAN INTERLOPER

If you have ever been to the beach a few days after a storm and turned over the piles of seaweed that have been washed on to the strandline, you will have noticed many dark shrimp like creatures leaping frantically about in a desperate attempt to escape from the light. These are members of the crustacean group the amphipoda, which go by the common name of sandhoppers. Such a sight is extremely common, but if whilst walking through a woodland you disturbed the leaf litter and observed a similar occurrence it might strike you as unusual. This would almost certainly be a sighting of the woodhopper *Arcitalitrus dorrieni*.

Back in 1925 Col Dorrien-Smith discovered a small shrimp like creature in leaf litter from the Abbey gardens on Tresco in the Isle of Scilly. This was well away from the aquatic or semi aquatic habitat that is normally associated with such animals. A specimen was duly sent to the Marine Biological Association Laboratories in Plymouth. There Mr Hunt identified it as an amphipod and declared it a species new to science, giving it the name *Talitrus dorrieni* after its discoverer. Then in 1936 it was located in the environs of lake Kelymore, Co Galway Ireland, living in damp leaf litter. Fourteen years later it was reported from the pine woods that bordered the Abbey gardens on Tresco and by 1960 it had been



The woodhopper *Arcitalitrus dorrieni* found on most of the other islands in the Scilly's group.

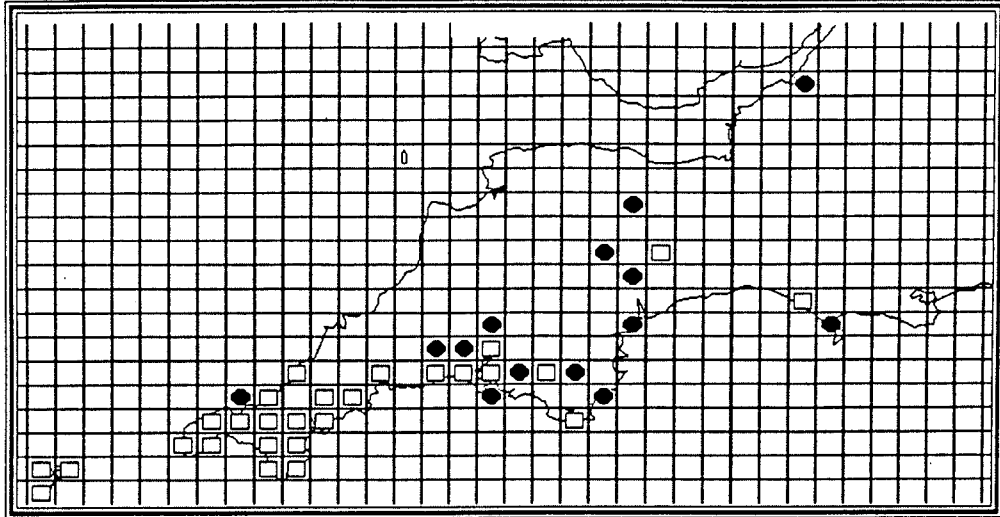
1961 saw the first mainland record from a garden in Penzance and by 1976 it had spread as far as Truro.

The next new siting was reported two years later from the Isle of Colonsay in the inner Hebrides, followed two years later by the discovery of a colony in the grounds of Kew gardens on the outskirts of London.

All of these sightings were associated with gardens containing collections of sub tropical plants from New Zealand, which included tree ferns of the genus *Dickensonia*. Where coincidentally terrestrial amphipods are also to be found.

The inference has been drawn that the woodhoppers were introduced to these sites with the tree ferns, being transported in the soil associated with their roots or in the recesses formed by the shaggy scales on the trunks.

Since its discovery on the Cornish mainland the woodhoppers distribution has been expanding steadily eastward. The first Devon record was in 1982 from Budeshead wood on the outskirts of Plymouth. A quick survey of



### The distribution of the Woodhopper in SW Britain.

Squares = pre 1992 data

Circles = 1992 data

the Plymouth area revealed it was also present in Fordpark cemetery but no further colonies were located. Two years later it was recorded from the woodland adjacent to Budeshead wood and by 1990 it was present in almost every woodland within the city boundary.

The current survey has revealed woodhopper colonies spread across South Devon into Dorset with an isolated population at Bristol. This distribution poses the questions, what is constraining the spread of the woodhoppers and how are they transported from site to site.

It has been demonstrated that the woodhopper can move as much as 40 meters a night in Tasmania. If its dispersal rate was the limiting factor it could be expected to be more widespread than it is, given that it has been 70 years since it was first discovered on the mainland. The other options are that the required habitat has a patchy distribution or that some climatic factor is exerting a controlling influence.

In order to answer these questions we are attempting to delimit the woodhoppers current distribution. As at the moment it is unclear if the woodhopper is absent from most of N Devon, Dorset and Somerset or merely not yet recorded.

If you encounter a colony please send in a specimen or two packed in cotton wool dampened with either methylated spirit or water then sealed in a 35mm film canister. Please enclose the following details.

The site name and address.

The site map reference.

The habitat in which it was found.  
(Gardens, Parks, Woodland, etc)

The date of the first sighting.

We wish you luck in locating our antipodean interloper.

Peter Smithers and Tony Barber

Please send your samples to;  
The Woodhopper Survey  
Dept Biological Science  
University of Plymouth  
Drake Circus  
Plymouth  
Devon PL4 8AA