

On the Occurrence of *Onchidella celtica* (Cuvier) on the Cornish Coast.

By

F. S. Russell, D.S.C., B.A.

Assistant Naturalist at the Plymouth Laboratory.

*Onchidella** *celtica* (Cuvier) is the only representative of its genus found on our shores. Included in the Sub-order Stylommatophora of the Pulmonates, it is believed to be a land mollusc that has reverted to a marine habitat. It is quite devoid of a shell and closely allied to the land slugs.

On account of its apparent rarity I have thought it worth while to note the occurrence of this species at Newquay on the North Coast of Cornwall.

In 1882, Joyeux-Laffuie† gave a full account of the morphology and development of the animal under the name of *Oncidium celticum* Cuvier. He says that it was first found by Cuvier on the Coast of Brittany, but there was no record of the locality taken. Later, Andoin and M. H. Milne-Edwards found it at the mouth of the Ranche on the Brittany Coast, where it was again discovered in 1870 by M. Vaillant. From then until 1882 there were no more records of it until Joyeux-Laffuie started to search for new localities. He discovered it in abundance at Duon, les Sept-Iles, Le Conquêt, and Morgate. In addition to these five points on the Brittany Coast it has been reported on the shores of Cornwall at Westcomb, Lantivet Bay near Fowey, by Couch, and at Whitsand Bay near Plymouth by Spence Bate.

Joyeux-Laffuie states that in the regions in which it occurs *Onchidella* is very local in its distribution. As regards its actual habitat at three places the animals were found 2 or 3 metres above high-tide mark, but in the other two regions they were in a zone that would be completely covered at high water. They occur in rocks where there are crevices into which they can retreat; into these they creep at high water to shelter

* This generic name has recently been readopted from Gray by H. Watson in a paper on The South African Species of the Molluscan Genus *Onchidella*. *Annals of the South African Museum*, Vol. XX, Pt. 4, No. 6, 1925. The genus has been known in most textbooks as *Oncidiella*.

† J. Joyeux-Laffuie. Organisation et Développement de l'Oncidie *Oncidium celticum* Cuv. Archives de Zoologie Expérimentale et Générale, Tome X, 1882, pp. 225-383.

from the force of the breaking waves, which might dislodge them from the rocks on which they only have a feeble foothold. They leave their retreats an hour or an hour and a half after the tide begins to go down, and move about over the rock seeking the small algæ on which they feed. The length of time they stay out of the crevices is governed by conditions of humidity and temperature: on dull, damp days they may remain out for three or four hours, but on hot, dry days for two hours only. In the cold winter months they seldom leave their shelters: if the nooks are examined then the animals are found huddled together in small groups. I might add that this thigmotactic response is very evident; if the animals are kept together in a jar, they will crawl all over each other and congregate into a compact little clump.

I found this species on an island rock in the Fistral Bay at Newquay, in a position well provided with crevices and cracks for retreat: the animals were walking about in groups at a level about the half-tide mark, and would most certainly be covered at high tide, the whole island becoming submerged then. It agrees with Joyeux-Laffuie's remark that they are extremely local that I have never found them on any of the other rocks in the immediate neighbourhood, rocks which to all appearances would offer a similar habitat.

This mollusc is very difficult to see because of its dull greyish colour which harmonizes so well with its background, and it seems probable that careful search in summer months would considerably widen its known distribution. It is interesting to note that it has spread to the North Coast of Cornwall, Lantivet and Whitsand Bays both being on the South Coast almost exactly opposite the region on the Coast of Brittany, which would seem to be its main locus of distribution.