

TRUNCATELLA SUBCYLINDRICA (LINNAEUS, 1767) IN IRELAND**Julia D. Nunn¹, Roy Anderson² and Shelagh M. Smith³**¹*Ulster Museum, Botanic Gardens, Belfast BT9 5AB, Northern Ireland*²*School of Agriculture, Queen's University, Newforge Lane, Belfast BT9 5PX, Northern Ireland*³*Woodleigh, Townhead, Hayton, Cumbria CA4 9JH, England*

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ABSTRACT

In July 2000, two colonies of the brackish-water gastropod *Truncatella subcylindrica* (L.) were located in Galway Bay. These were the first live records for Ireland. The only apparent previous record was a shell from Bundoran in the mid 19th century, considered by later workers to be in error. Prior to the discovery in Ireland, the species had only been recorded from the extreme south-west and south of England in Britain. The colonies in Galway are currently the most northerly in the world.

A project was undertaken in 2001, supported by a grant from the Praeger fund of the Royal Irish Academy, to study the ecology and associated fauna and flora of *Truncatella subcylindrica*, and to search for further colonies. A total of 50 site visits was made in August and November to Counties Galway, Clare, Mayo, Kerry and Wexford, with more detailed work undertaken at the two known colonies at Rincarna and Carrowmore.

The presence of *Truncatella subcylindrica* at Rincarna and Carrowmore was confirmed, and the extent of the colonies elucidated. Three shells of *Truncatella subcylindrica* were also found in shell sand from Rine Point, Co. Clare. A search at 47 other sites in the counties listed failed to find new colonies with live shells.

In many invertebrates there is a tendency for habitat preferences to become narrower close to the northern range limits. At Rincarna and Carrowmore, *Truncatella subcylindrica* is confined to muddy gravel near the top of the shore, on shingle spits impounding brackish lagoons, often in gravel under large boulders. The gravelly habitat is probably inundated only at spring tides but is kept constantly moist by the impoundment of the lagoon which leaches through the spit back into the sea. It has been observed on or in *Vaucheria* inside an inundated lagoon, and can stand immersion in fully saline water for some days although it is primarily amphibian or terrestrial. Densities of up to 500 animals.m⁻² were recorded on the *Vaucheria*. From observations, it is clear that that *T. subcylindrica* requires constant moisture, high (near fully marine) salinity, and gravelly or bare rock surfaces which serve to absorb the sun's heat.

The Rincarna and Carrowmore sites are possibly unique in Ireland,

although there is a slight chance that similar sites may exist in Co. Kerry. Both lagoons are small, and very vulnerable to disturbance. There has already been some dumping of rubbish at the western end of Rincarna Lagoons. It is suggested that these two sites be considered for maximum protection under available conservation legislation in Ireland.