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Short Papers and Notes:

**LORICIFERA,
A RECENTLY DESCRIBED PHYLUM,
OCCURRING IN THE NORTHERN
GULF OF MEXICO**

In 1983, Reinhardt Kristensen, of the Institute of Cell Biology and Anatomy at the University of Copenhagen, Denmark, described a new phylum of animals apparently closely related to, yet not a member of, some of the described phyla of the group referred to as Aschelminthes or Pseudocoelomata. Descriptions were made of specimens collected from 25-30 meters depth near Roscoff, France, 480m near the Azores, and 15m from six miles east of Fort Pierce, Florida, U.S.A. (Kristensen, 1983).

We herein report the occurrence of members of this phylum in the benthos of the northern Gulf of Mexico. Samples were taken during sampling cruises for Minerals Management Service Northern

Gulf of Mexico Continental Slope Study, under Contract number 14-12-0001-30212. Samples were collected with 3.5cm, inside diameter, meiofauna collecting tubes mounted inside a modified box corer. The upper 5cm of sediment was extruded into a sample container, narcotized with an isotonic (20%) solution of $MgSO_4$, and subsequently preserved in 15% formalin. Special "shock" treatment with fresh water as described by Kristensen was not used since there was limited time available for sample manipulation, no data was available regarding the effect of such treatment upon other members of the meiofauna, and we wished to maintain a consistency of treatment throughout the study. As the "shock" treatment is supposed to yield greater numbers of Loricifera from a sample than ordinary methods, one must wonder how many could have been found by using that treatment.

506 specimens were taken from the Eastern ($84^{\circ}31'28''W$), Western

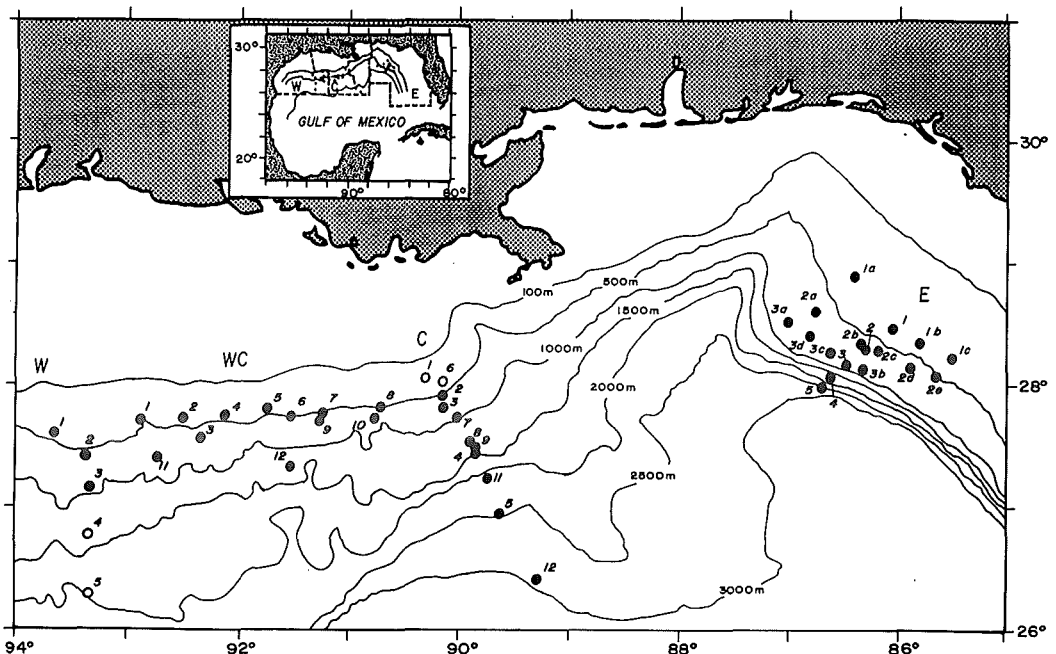


Figure 1. Locations of sampling stations in the northern Gulf of Mexico. Filled circles indicate stations where Loricifera were found.

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(93°33'06"W), and Central (approximately 90°W) Gulf transects, from samples taken during five separate cruises over the course of three years (1983 - 1985), and from depths ranging from 298 to 2959 meters (a complete list of Loricifera numbers, locations, and sediment characteristics is available from the authors upon request). Of the 506 total specimens, 262 came from the Eastern, 166 from the Central, and 78 from the Western transect areas. No clear pattern of depth preference emerges from the given data.

These observations substantially increase both the geographic and depth ranges for the Loricifera.

LITERATURE CITED

Kristensen, R.M. 1983. *Z. zool. Syst. Evolut. —forsch.* 21 (1983) 163-180.

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