



Historical records of pollution in the Venice Lagoon using benthic foraminifera

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Anthropogenic activities and heavy industrialization after World War II have had a serious environmental impact on the Venice Lagoon. Here we present data from a series of vibracores collected along gradients of contamination in the Venice Lagoon. The purpose of this work is to study the recent history of environmental disturbance in the Venice Lagoon using the trace element chemistry and assemblage characteristics of benthic foraminifera ($>150 \mu\text{m}$). We are also conducting studies on the trace metal composition and ecology of the living population that will be used as a modern analogue for the fossil record. The assemblage compositions of both living and fossil faunas are characterized by the genus *Ammonia*, *Haynesina* sp. and several species of miliolids. Preliminary results show changes in the abundance of total foraminifera, species patterns and frequencies of deformed tests through time and among sites with different levels of pollution. The historical data will provide critical baseline information to assess temporal changes in the benthic fauna and pollutants.