

## PALEOECOLOGY OF THE LATE TRIASSIC EXTINCTION EVENT IN SOUTHWEST BRITAIN

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A high-resolution paleoecological study of the shelly invertebrate macrofauna across two marine Triassic/Jurassic boundary sections in the United Kingdom (St Audrie's Bay, southwest England; Lavernock Point, south Wales) is presented, utilizing a sampling and study regime designed to control for lithofacies and paleoenvironmental biases. Analyses fail to reveal convincing evidence of a catastrophic marine extinction event. Instead, the Late Triassic crisis in southwest Britain appears to be expressed in outcrop as a small-scale turnover event. There is, however, good evidence for significant paleoecological change in the marine ecosystem at this time. The immediate post-event recovery interval is characterized by assemblages of low abundance, low diversity, high dominance and low evenness that persisted for approximately one ammonite subzone, and animals of small body size for approximately one ammonite zone. Benthic paleoecological recovery was disrupted by an episode of anoxia. The pattern of body-size changes recorded in the shelly macrofauna closely matches that of the trace fossil record. Trends in shell thickness do not support the presence of a biocalcification crisis during the Late Triassic biotic turnover.