



## **The biotic recovery in the aftermath of the Permian-Triassic Boundary: New data from The Griesbachian of Oman**

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A new marine fauna from the basal Early Triassic of Oman challenges anew the traditional view of devastated ecosystems in the immediate aftermath of the Permian-Triassic boundary mass extinction. The new Griesbachian Asselah boulder yielded diverse pelagic and benthic faunas, including conodonts, ammonoids, gastropods and crinoid ossicles in mass abundance. This association of Permian survivors with Triassic taxa is hardly reconcilable with previous interpretation which saw comparably diverse assemblages as ecological refugium. Moreover, similarities between these tropical faunas and the coeval equatorial shelly benthos from South China and the silicified assemblages from the Boreal realm indicate that marine communities were (1) not affected by a delayed recovery and (2) the recovery was synchronous across the whole range of latitudes. Furthermore, the amount of species inherited from the Permian suggests that the Griesbachian was not a time of devastated ecosystems, but a time of transient diversity preceding the Dienerian minimum. Such unusually diverse Griesbachian assemblages also suggest that the previous view of a devastated Griesbachian marine fauna resulted from a preservation bias.