

Accepted Manuscript

Recovery and diversification of marine communities following the late Permian mass extinction event in the western Palaeotethys

William J. Foster, Krisztina Sebe



PII: S0921-8181(17)30057-7
DOI: doi: [10.1016/j.gloplacha.2017.07.009](https://doi.org/10.1016/j.gloplacha.2017.07.009)
Reference: GLOBAL 2611
To appear in: *Global and Planetary Change*
Received date: 4 February 2017
Revised date: 11 July 2017
Accepted date: 12 July 2017

Please cite this article as: William J. Foster, Krisztina Sebe , Recovery and diversification of marine communities following the late Permian mass extinction event in the western Palaeotethys, *Global and Planetary Change* (2017), doi: [10.1016/j.gloplacha.2017.07.009](https://doi.org/10.1016/j.gloplacha.2017.07.009)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Recovery and diversification of marine communities following the late Permian mass extinction event in the western Palaeotethys

Authors: William J. Foster¹, Krisztina Sebe²

Affiliations:

¹ University of Texas at Austin, Jackson School of Geosciences, Austin, Texas 78712. USA.

² University of Pécs, Institute of Geography, Dept. of Geology and Meteorology, Pécs, Hungary.

Corresponding author: William Foster.

E-mail address: william.foster@gmx.co.uk.

Abstract

The recovery of benthic invertebrates following the late Permian mass extinction event is often described as occurring in the Middle Triassic associated with the return of Early Triassic Lazarus taxa, increased body sizes, platform margin metazoan reefs, and increased tiering. Most quantitative palaeoecological studies, however, are limited to the Early Triassic and the timing of the final phase of recovery is rarely quantified. Here, quantitative abundance data of benthic invertebrates were collected from the Middle Triassic (Anisian) succession of the Mecsek Mountains (Hungary), and analysed with univariate and multivariate statistics to investigate the timing of recovery following the late Permian mass extinction. These communities lived in a mixed siliciclastic-carbonate ramp setting on the western margin of the Palaeotethys Ocean. The new data presented here is combined with the previously studied Lower Triassic succession of the Aggtelek Karst (Hungary), which records deposition of comparable facies and in the same region of the Palaeotethys Ocean. The Middle Triassic benthic fauna can be characterised by three distinct ecological states. The first state is recorded in the Viganvár Limestone Formation representing mollusc-dominated communities restricted to above wave base,

Download English Version:

<https://daneshyari.com/en/article/5755261>

Download Persian Version:

<https://daneshyari.com/article/5755261>

[Daneshyari.com](https://daneshyari.com)