

1. Record Nr.	UNINA9910450691003321
Titolo	The great Ordovician biodiversification event // edited by Barry D. Webby [and three others]
Pubbl/distr/stampa	New York ; ; Chichester, England : , : Columbia University Press, , 2004 ©2004
ISBN	0-231-50163-3
Descrizione fisica	1 online resource (497 p.)
Collana	Critical Moments and Perspectives in Earth History and Paleobiology
Disciplina	560/.1731
Soggetti	Paleontology - Ordovician Biodiversity Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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## Sommario/riassunto

Two of the greatest evolutionary events in the history of life on Earth occurred during Early Paleozoic time. The first was the Cambrian explosion of skeletonized marine animals about 540 million years ago. The second was the "Great Ordovician Biodiversification Event," which is the focus of this book. During the 46-million-year Ordovician Period (489-443 m.y.), a bewildering array of adaptive radiations of "Paleozoic- and Modern-type" biotas appeared in marine habitats, the first animals (arthropods) walked on land, and the first non-vascular bryophyte-like plants (based on their cryptospore record) colonized terrestrial areas with damp environments. This book represents a compilation by a large team of Ordovician specialists from around the world, who have enthusiastically cooperated to produce this first globally orientated, internationally sponsored IGCP (International Geological Correlation Program) project on Ordovician biotas. The major part is an assembly of genus- and species-level diversity data for the many Ordovician fossil groups. The book also presents an evaluation of how each group diversified through Ordovician time, with assessments of patterns of change and rates of origination and extinction. As such, it will become the standard work and data source for biotic studies on the Ordovician Period.

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