1. Record Nr. UNINA9910156338603321 Evolution of the Vertebrate Ear: Evidence from the Fossil Record / / **Titolo** edited by Jennifer A. Clack, Richard R Fay, Arthur N. Popper Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XVI, 355 p. 116 illus., 52 illus. in color.) Springer Handbook of Auditory Research, , 2197-1897; ; 59 Collana Disciplina 591.1825 Soggetti Otorhinolaryngology Neurosciences Neuroscience Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Preface -- Vertebrate Diversity in a Sensory System: The Fossil Record of Otic Evolution -- Actinopterygians: The Ray-Finned Fishes—an Explosion of Diversity -- Sarcopterygians: From Lobe-Finned Fishes to the Tetrapod Stem Group -- Early Tetrapods: Experimenting with Form and Function -- Nonmammalian Synapsids: The Beginning of the Mammal Line -- Evolution of the Middle and Inner Ears of Mammaliaforms: The Approach to Mammals -- Evolution of the Ear of Mammals: From Monotremes to Humans -- Basal Reptilians, Marine Diapsids, and Turtles: The Flowering of Reptile Diversity -- The Lepidosaurian Ear: Variations on a Theme -- Archosaurs and their Kin: The Ruling Reptiles -- Amphibia: A Case of Diversity and Convergence in the Auditory Region. Sommario/riassunto The evolution of vertebrate hearing is of considerable interest in the hearing community. However, there has never been a volume that has focused on the paleontological evidence for the evolution of hearing and the ear, especially from the perspective of some of the leading paleontologists and evolutionary biologists in the world. Thus, this volume is totally unique, and takes a perspective that has never been taken before. It brings to the fore some of the most recent discoveries among fossil taxa, which have demonstrated the sort of detailed information that can be derived from the fossil record, illuminating the

evolutionary pathways this sensory system has taken and the diversity it had achieved.