Record Nr. UNINA9910798222903321 Autore Paradise Christopher J. Titolo Evolutionary history / / Christopher J. Paradise, A. Malcolm Campbell New York, [New York] (222 East 46th Street, New York, NY 10017):,: Pubbl/distr/stampa Momentum Press, , 2016 1-60650-966-7 **ISBN** 1 online resource (65 pages): illustrations Descrizione fisica Collana Biology collection 575 Disciplina Soggetti **Evolution (Biology)** Plants - Evolution Human evolution Libros electronicos. Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1. Descent with modification and adaptive radiations can be observed -- Adaptive radiation of orchids from a common ancestor -- Rapid diversification in bats --2. Terrestrial plants evolved from aquatic ancestors millions of years ago --3. Humans evolved from hominid ancestors in Africa -- Ethical, legal, social implications: eugenics yesterday and today -- Ethical, legal, social implications: evolution has not reached its peak; humans are still evolvina --4. Evolution can occur quickly in response to strong selection --Ethical, legal, social implications: overuse of chemicals like pesticides and antibiotics can have detrimental effects --Conclusion -- Glossary -- Index. This book describes how evolutionary history is studied using several Sommario/riassunto well-known examples and also using evolutionary trees. Evolutionary trees are analyzed and used to explain adaptive radiations of orchids and the diversification of bats over geologic time. Evolutionary trees and genetic evidence is used to infer when and from what ancestors terrestrial plants evolved and invaded land. Specific adaptations of early land plants led to the evolution of terrestrial plants and their success

on land. Evidence about the ancestors and habitats of humans is used to infer and analyze the evolution of the human family tree, whose populations were subject to the same forces of evolution to which other species are subject. Human evolution was not linear, involved offshoot species that did not survive, and took many thousands of years. In contrast, evolution can be seen in just a few years or less in other examples, and analysis of the evolution of mechanisms of pesticide resistance in insects will be used to illustrate this rapid evolution.