Record Nr. UNINA9910253998303321 Autore Prado José Luis Titolo Fossil Horses of South America: Phylogeny, Systemics and Ecology // by José Luis Prado, María Teresa Alberdi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-55877-3 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (X, 150 p. 44 illus., 23 illus. in color.) Collana The Latin American Studies Book Series, , 2366-3421 Disciplina 569.72 Soggetti Paleontology Geobiology Animal ecology Paleontology Biogeosciences **Animal Ecology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Taxonomy nomenclature -- Collections around the word -- Systematic and phylogeny -- Iostratigraphy and biogeography -- Ancient feeding ecology and niche differentiation of Pleistocene horses -- Horses and megafauna extinction. Sommario/riassunto This book provides an update on the phylogeny, systematics and ecology of horses in South America based on data provided over the past three decades. The contemporary South American mammalian communities were shaped by the emergence of the Isthmus of Panama and by the profound climatic oscillations during the Pleistocene. Horses were a conspicuous group of immigrant mammals from North America that arrived in South America during the Pleistocene. This group is represented by 2 genera, Hippidion and Equus, which include small species (Hippidion devillei, H. saldiasi, E. andium and E. insulatus) and large forms (Equus neogeus and H. principale). Both groups arrived in South America via 2 different routes. One model designed to explain this migration indicates that the small forms used the Andes corridor.

while larger horses used the eastern route and arrived through some

coastal areas. Molecular dating (ancient DNA) suggests that the South American horses separated from the North American taxa (caballines and the New World stilt-legged horse) after 3.6 - 3.2 Ma, consistent with the final formation of the Panamanian Isthmus. Recent studies of stable isotopes in these horses indicate an extensive range of 13C values cover closed woodlands to C4 grasslands. This plasticity agrees with the hypothesis that generalist species and open biome specialist species from North America indicate a positive migration through South America.