

THE TAPADO FAUNA (?CASAMAYORAN SALMA), ABANICO FORMATION,  
TINGUIRIRICA VALLEY, CENTRAL CHILE

FLYNN, John, American Museum of Natural History, New York, NY; CROFT, Darin, Case Western Reserve Univ. School of Medicine, Cleveland, OH; HITZ, Ralph, Tacoma Community College, Tacoma, WA; WYSS, Andre, Univ. of California at Santa Barbara, Santa Barbara, CA

Our previous studies in the Tinguiririca River Valley documented an early Oligocene assemblage, the main reference fauna for the Tinguirirican SALMA. The same valley has yielded a second assemblage, the Tapado Fauna, ~14 km NW of the main Tinguirirican localities. Several dozen fossils have been recovered from the Tapado Fauna in steeply-dipping exposures on both the N and S sides of the Tinguiririca River (over a N-S distance >3 km and nearly 1,000 meters elevation). Casual observation, and even previous mapping (e.g., Kohn's 1957 map), of the nearly continuous Abanico Fm. exposures in this valley give the misleading impression that the western horizons producing the Tapado Fauna lie substantially higher stratigraphically ( $\geq$  hundreds of meters) than the eastern deposits bearing the Tinguiririca Fauna. Six taxa have been identified from the Tapado Fauna to date: a "didolodontid condylarth" cf. *Ernestokenia* (Itaboraian-Casamayoran), cf. *Notonychops* (a questionable notoungulate, ?Riochican), the notostylopid *Notostylops* sp. (Casamayoran), a new basal interatheriid ("notopithecine"; a basal member of the clade containing all the Tinguirirican and younger interatheriids), the archaehyracid *Eohyrax* sp. (Riochican-Casamayoran), and the isotemnid *Pleurostylodon* sp. (Casamayoran). Therefore, the Tapado Fauna is inarguably older than the Tinguiririca Fauna, likely assignable to some part of the Casamayoran, demonstrating that low angle faulting has thrust (albeit cryptically) older strata over younger within the Tinguiririca Valley.

A few fossils of similar age have been recovered farther NW, in the Azufre River Valley. One small rostrum pertains to a basal interatheriid, preliminarily assigned to *Antepithecus brachystephanus*, suggesting a Casamayoran age for at least part of these deposits and representing the first known occurrence of this taxon outside of Patagonia. A diverse assemblage of Eocene age also has been discovered in the Teno River drainage (the next major drainage S of the Tinguiririca), documenting the excellent potential for recovery of early Paleogene faunas from this region of the Chilean Andes.