

A diverse snake fauna from the early Eocene of Vastan Lignite Mine, Gujarat, India

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The early Eocene (Ypresian) Cambay Formation of Vastan Lignite Mine in Gujarat, western India, has produced a diverse assemblage of snakes including at least ten species that belong to the Madtsoiidae, Palaeophiidae (*Palaeophis* and *Pterosphenus*), Boidae, and several Caenophidia. Within the latter taxon, the Colubroidea are represented by *Russellophis crassus* sp. nov. (Russellophiidae) and by *Procerophis sahnii* gen. et sp. nov. *Thaumastophis missiaeni* gen. et sp. nov. is a caenophidian of uncertain family assignment. At least two other forms probably represent new genera and species, but they are not named; both appear to be related to the Caenophidia. The number of taxa that represent the Colubroidea or at least the Caenophidia, i.e., advanced snakes, is astonishing for the Eocene. This is consistent with the view that Asia played an important part in the early history of these taxa. The fossils come from marine and continental levels; however, no significant difference is evident between faunas from these levels. The fauna from Vastan Mine includes highly aquatic, amphibious, and terrestrial snakes. All are found in the continental levels, including the aquatic palaeophiids, whereas the marine beds yielded only two taxa. Vastan Mine is only the second locality in which the palaeophiids *Palaeophis* and *Pterosphenus* co-occur. The composition of the fauna from Vastan is on the whole similar to that of the early Eocene of Europe; however, comparisons with early Eocene faunas of other continents are not possible because they are poorly known or unknown.

Key words: Serpentes, Caenophidia, Eocene, Vastan, India

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