

## Upper Cretaceous (Maestrichtian) dinosaur eggs and nests from India: their implications in understanding community structure and extinction of dinosaurs

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A few dozen of dinosaur nest-sites, having more than 15,000 well-preserved eggs, have been documented from the Lameta Formation (Maestrichtian) in parts of Gujarat, Madhya Pradesh and Maharashtra. The eggs occur as nests, eggs and eggshell debris. Parataxonomically the eggs have been assigned to oofamily Megaloolithidae and Elongatoolithidae for which eight new *Megaloolithus* species and one new genus *Ellipsoolithus*, have been respectively established. The eggs of these two oofamilies have been assigned to titanosaurids and abelisaurids that dominated the contemporary Indian dinosaur fauna. The existing evidences do not permit establishing a relationship between the individual egg oospecies and parent dinosaur taxon.

The evidences indicate community behaviour and preference for nesting in the river sand for both the *Titanosaurus* and abelisaurids. All the oospecies of eggs are laid in a single layer and buried in saucer-shaped pits. For a majority of nests no specific pattern of egg arrangement inside the nest is observable, but few *Megaloolithus* nests have been found to have eggs laid in a circular pattern, singular linear row, or arcuate fashion. A sole nest of small ellipsoidal *Trachoolithus* eggs has a concentrically arranged eggs in upright position. The sizeable number of unhatched eggs and total paucity of hatchlings and babies indicate its significant bearing on the extinction of dinosaurs towards towards the Cretaceous-Tertiary boundary.