

Oldest known caecilian found

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In news— A team of palaeontologists have discovered the first Triassic-era caecilian fossils, which are the oldest of their kind.

Key findings-

- **Triassic-era caecilian fossils are the oldest-discovered caecilian fossils** and extend the record of the small mammal by roughly 35 million years.
- **Prior to these findings, only 10 caecilian fossil occurrences had been discovered**, dating back to the early Jurassic period.
- **Fossil caecilians are extraordinarily rare, and they are found accidentally** when palaeontologists are searching for the fossils of other more common animals.
- **Before the new find, the 87-million-year gap in the fossil record obscured** the early evolutionary history of caecilians, leading to much debate amongst scientists over the relationships of caecilians to their amphibian relatives, frogs and salamanders.
- *Funcusvermis gilmorei* extends the humid equatorial pattern of occurrence seen in all known fossil and living caecilians, suggesting that the biogeographic history of caecilians has been guided by restriction to these ecological settings, likely due to physiological constraints linked to humidity, and constrained by the drift of continental plates into and out of the humid-equatorial zone after the fragmentation of Pangaea

What are caecilians?

- **Caecilians (New Latin for 'blind ones')** are a group of **limbless, vermiform** (worm-shaped) or serpentine (snake-shaped) amphibians.
- They mostly live hidden in soil or in streambeds, and this cryptic lifestyle renders caecilians among the

least familiar amphibians.

- **Modern caecilians live in the tropics of South and Central America, Africa, and southern Asia.** Caecilians feed on small subterranean creatures such as earthworms.
- **The body is cylindrical and often darkly coloured, and the skull is bullet-shaped and strongly built.**
- **Caecilian heads have several unique adaptations, including fused cranial and jaw bones,** a two-part system of jaw muscles, and a chemosensory tentacle in front of the eye.
- **The skin is slimy and bears ringlike markings or grooves, which may contain tiny scales.**
- Modern caecilians are grouped as a clade, Apoda, one of three living amphibian groups alongside Anura (frogs) and Urodela (salamanders).
- Apoda is a crown group, encompassing modern, entirely limbless caecilians. There are more than 200 living species of caecilian distributed across 10 families.