Footprints of 3 dinosaur species found in Thar desert

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In news— In a latest discovery, footprints of three species of dinosaurs have been found in the Thar desert, Jaisalmer district in Rajasthan.

About the discovery-

- The recent discovery proves the presence of the giant reptiles in the western part of Rajasthan, which formed the seashore to the Tethys Ocean during the Mesozoic era.
- The footprints are 200 million years old and were found near Jaisalmer's Thaiat village.
- The footprints, made in the sediment or silt of the seashore, later become permanently stonelike.
- They belong to three species of dinosaurs Eubrontes cf. giganteus, Eubrontes glenrosensis and Grallator tenuis.
- Eubrontes could have been 12 to 15 metres long and weighed between 500 kg and 700 kg.
- While the height of the Grallator is estimated to have been two metres, as much as a human, with a length of up to three metres.
- The giganteus and glenrosensis species have 35 cm footprints, the footprint of the third species was found to be 5.5 cm.
- As per the researchers, some features of the Grallator tenuis footprint, involving a wide angle of digits, very narrow toes, and long claws, had strong similarities to the early Jurassic ichnogenus of Stenonyx.
- There could be taxonomic variation between the

Grallator tracemakers from North America and the findings in Rajasthan.

- All the three species, belonging to the early Jurassic period, were carnivorous.
- Geochemical analyses and calculation of weathering indices showed that the hinterland climate was seasonal to semi-arid during the deposition of the footprints.

Previous discoveries-

- Jan Schlogl of Comenius University in Slovakia and Grzegorz Pienkowski from Warsaw University in Poland were the first to discover dinosaur footprints in India after the 'Ninth International Congress on the Jurassic System' was held in Jaipur in 2014.
- In 2016, a team from the geological department of Jainarayan Vyas University, Jodhpur, discovered 150 million-year-old footprints of the Eubrontes Gleneronsensis Theropod dinosaurs in Lathi formation of Jaisalmer district.

Dinosaurs-

- Dinosaur, (clade Dinosauria), the common name given to a group of reptiles, often very large, that first appeared roughly 245 million years ago (near the beginning of the Middle Triassic Epoch) and thrived worldwide for nearly 180 million years.
- The name dinosaur comes from the Greek words deinos ("terrible" or "fearfully great") and sauros ("reptile" or "lizard").
- Most died out by the end of the Cretaceous Period, about 66 million years ago, but many lines of evidence now show that one lineage evolved into birds about 155 million years ago.

The 'Age of Dinosaurs' (the Mesozoic Era)-

- It included three consecutive geologic time periods (the Triassic, Jurassic, and Cretaceous Periods).
- Different dinosaur species lived during each of these three periods.
- For example, the Jurassic dinosaur Stegosaurus had already been extinct for approximately 80 million years before the appearance of the Cretaceous dinosaur Tyrannosaurus.