

Ancient 'marine crocodile' fossil discovered

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In news- Recently, Palaeontologists have uncovered a new **thalattosuchian—an ancient “cousin” of modern-day crocodiles,** which could be the **oldest of its kind ever discovered.**

About Thalattosuchian-

- The **fossils uncovered on the Jurassic Coast in the United Kingdom** include part of the head, backbone, and limbs of *Turnersuchus hingleyae*.
- The newly-discovered fossils of *Turnersuchus hingleyae* **represent the only complete Thalattosuchian of its age** and date back to the early Jurassic, Pliensbachian period, which was about 185 million years ago.
- The researchers stated that **the discovery of this new fossil helps fill a gap in the fossil record and suggests that Thalattosuchians and other crocodile-like animals** could have originated around 15 million years farther than *Turnersuchus*.
- Their analyses suggest that Thalattosuchians likely first appeared in the Triassic and survived the end-Triassic mass extinction.
- But, no expedition has found Thalattosuchians in Triassic rocks yet, which means that there is a ghost lineage.
- This means there is a group that scientists know existed, but they do not yet have fossil evidence.
- Until the discovery of the latest fossil, this ghost lineage extended from the end of the Triassic period till the Toarcian period. But now, it has been reduced by a few million years.
- **Due to their relatively long, slender snouts, it is likely that they would have looked similar to the**

currently living gharial crocodiles.

- Gharial crocodiles are usually found in the major river systems of Northern India. But according to the researchers, **though thalattosuchians' skulls looked similar to gharial crocodiles, they were constructed differently.**
- **The region of the skull housing jaw muscles was particularly large in the species,** suggesting that **they had enlarged jaw muscles** that made fast bites possible.
- This would have been useful considering that most of their prey were probably fast-moving fish and cephalopods like squids and octopuses.