

# Vishnuonyx otters

September 22, 2021

**In news**– A newly found fossils indicate that the Vishnuonyx otter had travelled as far as Germany.

## **Key updates on recent discovery-**

- **Researchers from the Universities of Tübingen and Zaragoza have discovered the fossil** of a previously unknown species, which they have **named Vishnuonyx neptuni, meaning 'Neptune's Vishnu'**.
- The species was **discovered from a 11.4-million-year-old strata in the area of Hammerschmiede, which is a fossil site in Bavaria, Germany** that has been studied for about 50 years.
- This is the **first discovery of any member of the Vishnuonyx genus in Europe**; it is also its most northern and western record till date.
- Vishnuonyx **depended on water and could not travel long distances over land.**
- However, its travels over 6,000 km were probably made possible by the geography of 12 million years ago, when the Alps were recently formed.
- These Alps and the Iranian Elbrus Mountains were separated by a large ocean basin, which would have made it easier for the otters to cross it.
- Researchers believe 'Neptune's Vishnu' **first reached southern Germany, followed by Ancient Guenz and eventually, the Hammerschmiede.**
- The new **species differs from the already known members of the genus in size** – intermediate between the African Vishnuonyx angololensis and the Asiatic Vishnuonyx chinjiensis – and morphology.

**The dispersal of Vishnuonyx otters from the Indian subcontinent to Africa and Europe about 13 million years ago.**



### About Vishnuonyx otters-

- Vishnuonyx were **mid-sized predators that weighed, on average, 10-15 kg.**
- Before this, **the genus was known only in Asia and Africa** (recent findings show that Vishnuonyx reached East Africa about 12 million years ago).
- They lived in the major rivers of southern Asia between 12.5 million and 14 million years ago.
- **Fossils of these now extinct otters were first discovered in sediments found in the foothills of the Himalayas.**

### About otters-

- Otters **are carnivorous mammals in the subfamily Lutrinae.**
- The **13 extant otter species** are **all semiaquatic, aquatic or marine**, with diets based on fish and invertebrates.
- Lutrinae is a branch of the Mustelidae family, which also includes weasels, badgers, mink, and wolverines, among other animals.
- Otters have long, slim bodies and relatively short limbs.
- Their most striking anatomical features are the **powerful webbed feet used to swim, and their seal-like abilities holding breath underwater.**
- Most have sharp claws on their feet and all except the sea otter have long, muscular tails.

- **The Asian small-clawed otter is the smallest otter species and the giant otter and sea otter are the largest.**
- They have very soft, insulated underfur, which is protected by an outer layer of long guard hairs.
- This traps a layer of air which keeps them dry, warm, and somewhat buoyant underwater.