Dickinsonia in Bhimbetka

February 15, 2021

In News: Researchers have discovered three fossils of the earliest known living animal — the 550-million-year-old 'Dickinsonia' — on the roof of the Bhimbetka Rock Shelters, about 40 km from Bhopal.



About Dickinsonia

- Dickinsonia is an extinct genus of basal animal that lived during the late Ediacaran period in what is now Australia, Russia and Ukraine.
- The individual Dickinsonia typically resembles a bilaterally symmetrical ribbed oval.
- Its affinities are presently unknown; its mode of growth is consistent with a stem-group bilaterian affinity, though some have suggested that it belongs to the fungi or even an "extinct kingdom".
- The discovery of cholesterol molecules in fossils of Dickinsonia lends support to the idea that Dickinsonia was an animal.

What are the new findings?

- Like the awe-inspiring rock shelters themselves, this fossil was discovered by chance.
- Researchers have found the first-ever fossil in India of a Dickinsonia —the Earth's 'oldest animal', dating back 570 million years — on the roof of what's called the 'Auditorium Cave' at Bhimbetka.
- Dickinsonia fossils have shown that they could exceed four feet in length but the one found in Bhimbetka is 17 inches long.
- Eleven feet above the ground, almost blending with the rock and easily mistaken by laymen for prehistoric rock art, they found imprints of the Dickinsonia.
- It is believed to be one of the key links between the early, simple organisms and the explosion of life in the Cambrian Period, about 541 million years ago.

Rock Shelters of Bhimbetka

- These rock shelters are located in the Raisen District of Madhya Pradesh, near Abdullaganj town and inside the Ratapani Wildlife Sanctuary.
- The Bhimbetka rock shelters are an archaeological site of the Paleolithic age.
- The name Bhimbetka is associated with Bhima, a herodeity of the epic Mahabharata. The word Bhimbetka is said to derive from Bhimbetka meaning "sitting place of Bhima".
- Dr V. S. Wakankar, a most renowned archeologist, discovered these caves in 1958.
- These rock shelters are declared a World Heritage Site in 2003.
- The entire region comprises more than 600 caves.
- These cave paintings show tremendous similarity to the aboriginal rock paintings of the Savanna regions of Australia, the paintings done by pygmies of the Kalahari Desert and the Paleolithic Lascaux cave paintings of France.

- These paintings demonstrate the lifestyle and everyday activities of our ancestors.
- Various community activities, like birth, burial, dancing, religious rites, hunting scenes, animal fighting and merrymaking, also pictured in these paintings.
- Pictures of animals like rhinoceros, tigers, wild buffalo, bears, antelopes, boars, lions, elephants, lizards etc. also description.

Recent updates (February 2023)

- A 550-million-year-old alleged fossil discovered near Bhopal in 2021 and thought to be of the extinct "Dickinsonia"—among the earliest living organisms on earth—has turned out to be the impression of a decayed beehive in a case of "misidentification".
- After an initial phase of controversy, whether it is an animal or a plant, it was classified as an animal after the discovery of cholesterol molecules in the fossils.
- Being the first and only "Dickinsonia" find in India, the research article by Ratllack and his team attracted worldwide attention.
- Dickinsonia is found on ocean floors around the present day's Australia, China, Russia, Ukraine, in the Ediacaran period—about 500 to 600 million years ago.