

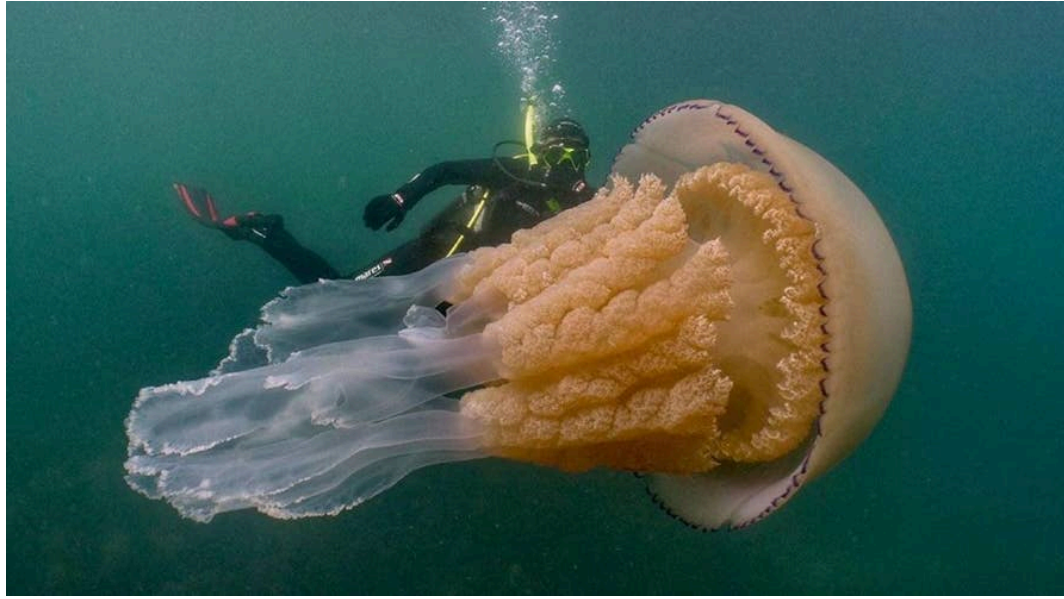
505-million-year-old jellyfish fossil

By IASToppers | 2023-08-08 15:55:00



505-million-year-old jellyfish fossil

The Royal Ontario Museum (ROM) has recently announced the discovery of the fossil of the 505-million-year-old jellyfish- ***Burgessomedusa phasmiformis***.



[Ref - Fox News]

About *Burgessomedusa phasmiformis* Jellyfish:

- It is a 505-million-year-old **swimming jellyfish** found at the **Burgess Shale** in the Cambrian ecosystem.
- It is the **oldest known swimming jellyfish** in the **fossil record**.
- Jellyfish are part of the **medusozoans**.
 - **Medusozoans** are a group of animals **producing medusae** and include present-day creatures like box jellies, hydroids, stalked jellyfish, and true jellyfish.
- Medusozoans are part of the ancient animal group called **Cnidaria** which also contains corals and sea anemones.
- **Burgessomedusa** is a definitive indication that large, swimming jellyfish with a traditional bell-shaped body had already evolved over **500 million years** ago.

Importance of to studying the history of these invertebrates:

- Researching such fossils illuminates the roots of the **modern biodiversity**, help us know the **origin** of life.
- These studies show the time periods of their existence.

About Burgess Shale diversity:

- The Burgess Shale is found in an area of the **Canadian Rocky Mountains** known as the **Burgess Pass**.
- Fossils were found on mountains in the Canadian Rockies in British Columbia.
- It became a **World Heritage Site** in the early **1980s**, famous for the **exceptional preservation of soft-bodied fossils**.
- That means fossils that don't have **shells** or **bones** and typically don't get preserved.

Beginning of life on Earth:

- Earlier, all animal life actually lived in the **oceans**.
- The **origin** of life started as very simple cells, maybe **four billion years ago**.
- It took **3.5 billion** years to start more complex life forms.
- It's only relatively recently that animals evolved during the **Cambrian Explosion** around **541 million years ago**.
- Jellyfish had evolved about **600 million years ago**, whereas life on land, especially animals, happened much later, perhaps **450 million years ago**.
- The first animals on land were likely **arthropods** or species with **jointed limbs** like shrimps, lobsters, etc.
 - It is only much later that **vertebrates** came into existence.