



Rapid Fire Current Affairs

NASA's First Asteroid Samples Land on Earth

- The [NASA's Origins, Spectral Interpretation, Resource Identification, and Security-Regolith Explorer \(OSIRIS-REx\)](#) spacecraft, launched on 8th September 2016, has successfully delivered the **first asteroid samples** from the near-Earth asteroid [Bennu \(formerly 1999 RQ36\)](#) to Earth after a seven-year journey, bringing valuable **4.5 billion-year-old samples**.
 - The Osiris-Rex sample capsule was released during an Earth flyby, landing safely in the **Utah desert, United States** preserving the asteroid samples.
 - Scientists estimate the capsule has at least a cupful of debris from the **carbon-rich asteroid Bennu**.
 - The samples are expected to provide insights into the **formation of Earth and life 4.5 billion years ago**.
- Osiris-Rex will continue its mission by studying another asteroid, [Apophis](#), which it will reach in 2029.

Read more: [NASA's OSIRIS-REx Mission](#)

Philippine Officials Challenge China's South China Sea Barrier



- Philippine officials vowed to remove China's coast guard-installed 300-meter-long floating barrier in the disputed **Scarborough Shoal of the South China Sea**. They called it "**illegal and illegitimate**," highlighting the **violation of Filipino fishermen's rights**.
 - The Philippines asserts that Scarborough Shoal **lies within its United Nations Convention on the Law of the Sea (UNCLOS)-defined exclusive economic zone, a claim upheld in a 2016 arbitration decision** that China rejected.
 - This dispute adds to long-standing territorial tensions in the South China Sea, a potential **Asian geopolitical hotspot**.
- The South China Sea, an arm of the **Western Pacific Ocean**, is bordered by Brunei, Cambodia, China, Indonesia, Malaysia, the Philippines, Singapore, Taiwan, Thailand, and Vietnam.
 - It connects to the **East China Sea via the Taiwan Strait and the Philippine Sea through the Luzon Strait**.

- It encompasses the Spratly Islands, Paracel Islands, Pratas Islands, Macclesfield Bank, and Scarborough Shoal.

Read more: [South China Sea](#)

Maharashtra's Ephemerals



In parts of **Maharashtra**, a fascinating botanical phenomenon unfolds as **certain plant species, known as ephemerals**, patiently **await the [monsoon season](#) to burst into bloom**.

- These **ephemerals come in two forms: annual and perennial**.
 - Annual ephemerals create new individuals each year, showcasing their beauty for a brief period before **forming seeds and lying dormant until the next monsoon**.
 - Perennials, on the other hand, have a **continuous presence underground**, with tubers or bulbs supporting their existence.
- From ground orchids to lilies, wild yam, and Indian squill, these ephemerals play a crucial role as **nectar and [pollen sources](#)** for native pollinators while also preserving essential soil and water dynamics.

Monsoon Withdrawal from India Delayed

The **[southwest monsoon](#)** in India has **started to withdraw**, eight days later than the normal date, according to the **[India Meteorological Department](#)**. 2023 marks the **13th consecutive delayed withdrawal of the monsoon**.

- The **southwest monsoon typically starts over Kerala by 1st June** and covers the entire country by 8th July.
 - It begins **retreating from northwest India around September 17** and withdraws completely by October 15.
- A **delayed monsoon retreat leads to a longer rainy season**, which can have a significant impact on agricultural production, especially for northwest India where **monsoon rainfall is crucial for [Rabi crop production](#)**.

Read more: [Southwest monsoon](#)