Mass Nesting of Olive Ridley Turtles

Source: DTE

Why in News?

The **Olive Ridley turtles** are expected to return in large numbers to the **Rushikulya River mouth in Odisha** for their **mass nesting,** a vital occurrence for the conservation of this species.

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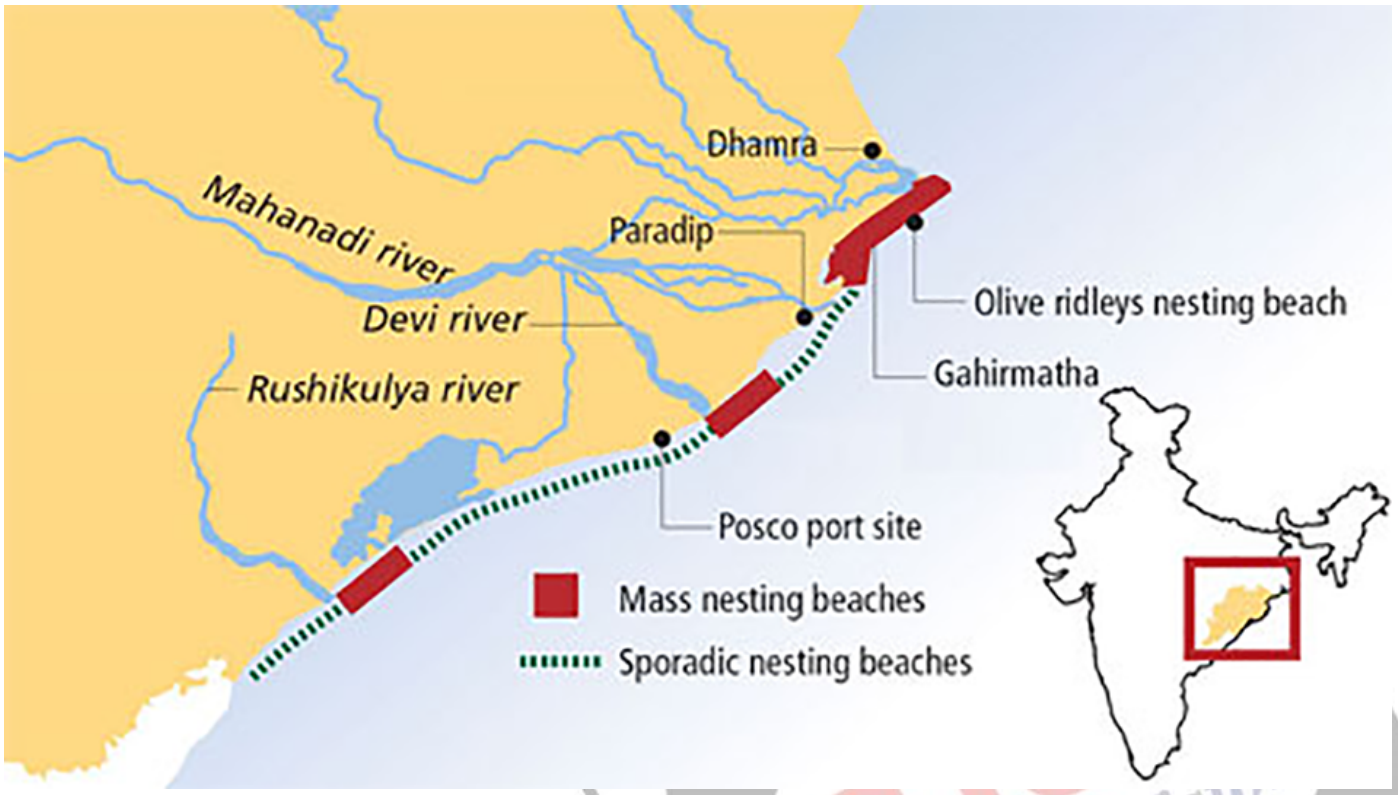
What are Key Facts About Olive Ridley Turtles?

- **Scientific Classification:**
  - **Scientific Name:** *Lepidochelys olivacea*
  - **Class:** *Reptilia*
  - **Family:** *Cheloniidae*
- **Appearance:** Olive ridley turtles are an **olive or grayish-green** with a **heart-shaped carapace (top shell)**.
  - They closely resemble **Kemp's ridleys** (primarily found in the Gulf of Mexico) and are the **smallest sea turtles.** Their size and shape vary by region, with the largest found in West Africa.
- **Habitat and Distribution:** Found in the **tropical** regions of the **Pacific, Indian, and Atlantic Oceans**. Inhabits both **pelagic (open ocean) and coastal** waters.
  - **Major nesting sites in India: Rushikulya, Gahirmatha, Devi River mouth** in Odisha, and the **Andaman Islands**.

- **Gahirmatha marine sanctuary** is recognised as the **largest known mass nesting rookery** for Olive Ridley sea turtles in the world.



- **Reproduction:** Olive ridley turtles are famous for **arribada** (Spanish for "arrival"), a unique **mass nesting behavior** where **thousands of females nest simultaneously.**
  - From September, they travel 9,000 km from the Pacific to the Indian seas. After mating, males retreat, and females nest from December to March.
    - Females nest 1-3 times per season, laying around 100 eggs per clutch.
    - The **sex of hatchlings is determined by nest temperature.**
- **Diet and Behavior:** Like **all sea turtle species**, except the **herbivorous Green Turtle,** the **Olive Ridley is an omnivore**, eating jellyfish, snails, crabs, prawns, algae, and small fish.
  - Migrate long distances between feeding and nesting sites.
- **Protection Status**:
  - **Wildlife Protection Act, 1972:** Schedule 1
  - **IUCN Red List:** Vulnerable
  - **CITES:** Appendix I
- **Threats:** Bycatch in fishing gear (trawls, gillnets, longlines).
  - Poaching and egg harvesting for human consumption.
  - Habitat loss from **coastal development, plastic ingestion, and marine pollution,** along with **rising temperatures and sea levels,** threaten olive ridley turtles by disrupting nesting sites and food sources.
- **Conservation Initiatives:**
  - **Operation Olivia**: **Indian Coast Guard** initiative (since the 1980s) to protect nesting turtles and prevent illegal trawling.
  - **Turtle Excluder Devices (TEDs)**: Odisha mandates TEDs in trawls(cone-shaped net) to prevent accidental deaths.
  - **Tagging**: Olive Ridley turtles are tagged with non-corrosive metal tags to track their movements and safeguard their habitats.

Note:

Indian biologist **Shailendra Singh** has been honored with the **Behler Turtle Conservation Award** (considered as the the **"Nobel Prize"** of turtle conservation) for saving **three critically endangered**

turtle species (Northern River Terrapin, Red-crowned Roofed Turtle, Black Softshell Turtle) from extinction.

Rushikulya River

- The Rushikulya River originates from the Rushyamala hills in the Eastern Ghats, Kandhamal district, Odisha and flows southeast into the **Bay of Bengal.**
    - Its prominent tributaries include **Padma, Boringanalla, Joro, Badanadi, Baghua, Dhanei, and Ghodhado**. The river has **no delta at its mouth.**

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. Which one of the following is the national aquatic animal of India? (2015)

(a) Saltwater crocodile

(b) Olive ridley turtle

(c) Gangetic dolphin

(d) Gharial

Ans: C

Q. Consider the following statements: (2019)

1. Some species of turtles are herbivores.
2. Some species of fish are herbivores.
3. Some species of marine mammals are herbivores.
4. Some species of snakes are viviparous.

Which of the statements given above are correct?

(a) 1 and 3 only

(b) 2, 3 and 4 only

(c) 2 and 4 only

(d) 1, 2, 3 and 4

Ans: (d)