



CURRENT AFFAIRS

ECOLOGY & ENVIRONMENT

2nd March - 7th March





1. Concentration of Black Carbon on Gangotri Glacier

Why in News?

According to research by Wadia Institute of Himalayan Geology, (WIHG) the concentration of black carbon in the Himalayan region has increased by 400 times.

• Wadia Institute of Himalayan Geology (WIHG) is an autonomous institution under the Department of Science & Technology.

Black Carbon

- Black carbon is a kind of an aerosol. An aerosol is a suspension of fine solid particles or liquid droplets in the air.
- It gets emitted from gas and diesel engines, coal-fired power plants, and other sources that burn fossil fuel.
- It comprises a significant portion of particulate matter or PM, which is an air pollutant.

Reasons for accumulation of Black Carbon

- Emissions from agricultural burning
- Forest fire along the Himalayan slopes
- Long-range transport of pollutants in winter

Impact

- The accumulation of black carbon can trigger glacial melt as the nature of black carbon is light absorbing.
- In the longer run, the changes in the atmospheric composition of the high Himalayan will affect the weather pattern (such as rain and snow precipitation patterns), and accordingly natural resources and socio-economic activities of Himalayan communities.

Gangotri Glacier

- It is the largest glacier in Uttarakhand and is one of the sources of Ganges (Bhagirathi).
- The Gangotri glacier originates at the northern slope of Chaukhamba range of peaks in Garhwal Himalayas.
- Gangotri is not a single valley glacier, but a combination of several other glaciers.

2. Whale Shark

- Whale sharks are the **largest shark** and they feed on **plankton**.
 - Plankton (singular plankter) are a diverse group of organisms that live in the water column and cannot swim against a current.
 - These organisms include drifting animals, protists, archaea, algae, or bacteria that inhabit the oceans, seas, or bodies of freshwater.





- Whale sharks travel large distances to find enough food to sustain their huge size, and to reproduce.
- They are notably the largest living non mammalian vertebrate.
- Habitat: Found in all tropical oceans of the world
- Threats: Oil & gas drilling, shipping lanes etc.
- Protection Status:
 - IUCN Red List: Endangered
 - **CITES:** Appendix II
 - Indian Wildlife Protection Act, 1972: Schedule I

3. Chilika Lake

Why in News?

Researchers have found the presence of a sizable population of a fishing cat, a Smooth Coated otter and an Eurasian otter in the Chilika lake.

Fishing Cat

- In India, fishing cats are mainly found in:
 - The mangrove forests of the Sundarbans.
 - The foothills of the Himalayas along the Ganga and Brahmaputra river valleys.
 - The Western Ghats.
- Protection Status
 - IUCN Red List: Vulnerable
 - CITES: Appendix II
 - Indian Wildlife Protection Act, 1972: Schedule I

Smooth-Coated Otter

- Smooth-coated otters are distributed throughout India from the Himalayas to the south.
- Protection Status
 - IUCN Red List: Vulnerable
 - CITES: Appendix II
 - Indian Wildlife Protection Act, 1972: Schedule II

Eurasian Otter

- Habitat:
 - Throughout Europe and Asia
 - Found in north Africa (Morocco, Algeria and Tunisia)
 - Also found in the Middle East (Israel, Jordan, Iraq and Iran)
- Protection Status
 - IUCN Red List: Near Threatened
 - CITES: Appendix I
 - Indian Wildlife Protection Act, 1972: Schedule II





Chilika Lake

- Chilika is Asia's largest and world's second-largest lagoon.
- It lies on the east coast of India in the state of Odisha, separated from the mighty Bay of Bengal by a small strip of sand.
- It is the largest wintering ground for migratory birds on the Indian subcontinent and is home to a number of threatened species of plants and animals.
- In 1981, Chilika Lake was designated the first Indian wetland of international importance under the Ramsar Convention.

4. <u>BEE - Star Rating Programme</u>

Why in News?

The Bureau of Energy Efficiency (BEE), Ministry of Power, has recently celebrated its 19th foundation day.

- On this occasion, it has included **Light Commercial Air Conditioners** (LCAC) and **Deep Freezers** under its star rating programme.
- It has also launched a new initiative: Urja Dakshata Information Tool (UDIT).

Key points

- With this inclusion BEE will cover 26 appliances.
- The program will be initially **launched in voluntary mode** from 2ndMarch, 2020 to 31st December, 2021.
 - Thereafter, it **will be made mandatory after reviewing the degree of market transformation** in this particular segment of appliances.
- Deep freezer and Light Commercial Air Conditioners (LCAC) are major energy guzzlers in commercial space.
 - Through this initiative, it is expected to save around 6.2 Billion Units by FY2030 in the Deep Freezer category and save around 2.8 Billion Units by FY2030 in LCAC.
- Urja Dakshata Information Tool (UDIT)
 - This initiative has been taken by the BEE with the **World Resources Institute (WRI).**
 - It aims to facilitate a database on energy efficiency.
 - It is a user-friendly platform that explains the energy efficiency landscape of India across industry, appliances, building, transport, municipal and agriculture sectors.
 - It will also showcase the capacity building and new initiatives taken up by the Government across the sectors in the increase energy efficiency domain.





Star Labeling Programme

- It has been formulated by the Bureau of Energy Efficiency, as part of its mandate, under the Energy Conservation Act, 2001.
- A key objective of this scheme is to provide the consumer an informed choice about the energy saving and thereby the cost saving potential of the relevant marketed product.

About Bureau of Energy Efficiency (BEE)

- BEE is a statutory body under the Ministry of Power, Government of India.
- It assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy.
- BEE coordinates with designated stakeholders to identify and utilize the existing resources and infrastructure, in performing the functions assigned to it under the energy conservation act.

5. <u>Ulsoor lake</u>

Why in News?

The National Green Tribunal (NGT) has directed the constitution of a joint committee to take samples of water from Ulsoor lake.

• It has been reported that the water quality has deteriorated due to anthropogenic activities.

Components of Water Analysis

- Biochemical Oxygen Demand (BOD)
 - BOD is the amount of dissolved oxygen used by microorganisms in the biological process of metabolizing organic matter in water.
 - Greater the BOD lower the amount of dissolved oxygen in water.
- Chemical Oxygen Demand
 - COD is a method of estimating how much oxygen would be depleted from a body of receiving water as a result of bacterial action.

Ulsoor lake

- It is also known as Halasuru Lake and located in Bangalore, Karnataka.
- It derives its name from the name of the locality it is situated, namely, Halasuru.

6. World Wildlife Day

Why in News?

World Wildlife Day was celebrated on March 3.

• Theme: "Sustaining all life on earth"





World Wildlife Day

- March 3 is chosen as World Wildlife Day as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was adopted on this date in 1973.
 - It was proclaimed by the United Nations General Assembly (UNGA) in 2013.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

- CITES is a multilateral treaty to protect endangered plants and animals.
- It is also known as the Washington Convention.
- The convention was opened for signature in 1973 and CITES entered into force on 1 July 1975.
- At present it has 183 parties.
- Aim: Ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species in the wild.
- Although it is legally binding on the Parties, it does not take the place of national laws.
 - It provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.

CITES Appendices:

- 1. **Appendix I** includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.
- 2. **Appendix II** includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
- Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

