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News: Launching of IBCA and Tiger Census Reports

International Big Cat Alliance (IBCA)

- International Big Cat Alliance (IBCA) is launched for conservation of seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Leopard, Cheetah, Jaguar and Puma harbouring our planet.
- Its members include 97 countries that are home to these big cats and other interested parties.
- The IBCA will engage in advocacy, partnerships, capacity building, ecotourism, and finance tapping.
- > It will also disseminate information and create awareness among its members.

Tiger Census – 2022 Highlights

Population

Population of tiger has grown by 200 from 2018 to 2022. The current tiger population in India is 3,167, up from 2,967 in 2018.

Growth Rate

➤ The growth rate slowed to 6.7% in the four years from 2018 to 2022, from around 33% during 2014-2018.

Increase

- There has been a significant increase in the tiger population in the Shivalik Hills and Gangetic Plains, while tiger occupancy in Jharkhand, Odisha, Chhattisgarh, and Telangana showed a decline.
- The North East Hills and Brahmaputra Plains had 194 tigers captured by camera traps, and the region's Nilgiri cluster is the largest tiger population in the world, contributing significantly to colonisation of tigers in neighbouring areas.

Decline

Tiger occupancy in the Western Ghats declined, the latest analysis showed. Significant declines were observed in the Wayanad landscape and in the Biligiriranga Hills.

High Conservation Priority

The genetically unique and small population of tigers in Simlipal is also highlighted as being of high conservation priority.

- The report calls for ecologically viable economic development and transboundary tiger conservation strategies to sustain isolated populations.
- The tiger census covered forested habitats in 20 states of India. Camera traps were set up at 32,588 locations and generated 47,081,881 photographs.

Tiger Census in India

- The national tiger census is done every four years by the National Tiger Conservation Authority (NTCA) in partnership with state forest departments, conservation NGOs, and the Wildlife Institute of India (WII).
- The census uses a double sampling method based on ground-based surveys and images from camera-traps.

News: TEMPO Satellite

Tropospheric Emissions Monitoring of Pollution (TEMPO)

Tropospheric Emissions Monitoring of Pollution (TEMPO) is a NASA device that can track air pollution over North America from space.

- It will allow scientists to monitor air pollutants and their emission sources down to the neighbourhood level.
- ➤ The TEMPO instrument is a grating spectrometer, sensitive to visible and ultraviolet wavelengths of light.

Features

- > TEMPO is hosted on an Intelsat communications satellite in geostationary orbit.
- It will be able to measure atmospheric pollution down to a spatial resolution of 4 square miles or neighbourhood level.

Applications and Importance

- TEMPO will have multiple applications from measuring levels of various pollutants to providing air quality forecasts and helping the development of emission-control strategies.
- More than 40% of the US population lives in places with unhealthy levels of particle pollution or ozone, and air pollution is blamed for some 60,000 premature deaths a year.