

Prelim Bits 28-08-2021 | UPSC Daily Current Affairs

Animal Discovery 2020

Recently, Animal Discovery 2020 was prepared by the Zoological Survey of India (ZSI) and released by the Environment Ministry.

- It reveals that India has added 557 new species to its fauna. Now, there are 1,02,718 faunal species in India.
- It shows that India is positioned 8th in mega biodiversity countries in the world with 0.46 BioD index. Around 23.39% of India's geographical area under forest and tree cover.

BioD index is calculated by its percentage of species in each group relative to the total global number of species in each group.

- Animal Discoveries are the only authentic source of faunal discoveries of India. It is published by the ZSI since 2009 every year.
- It is a document on new species and new records of fauna.

Zoological Survey of India

- Set up by British zoologist Thomas Nelson Annandale in 1916, the ZSI is India's apex organization on animal taxonomy.
- It is a subordinate organization of the Environment Ministry.
- Headquartered in Kolkata, the ZSI BSI has 16 regional circles at different regions of the country.
- ZSI promotes **survey**, **exploration and research** leading to the advancement of knowledge on many aspects of exceptionally rich faunal diversity of India.
- It has been declared as designated repository for **National Zoological Collection** under the National Biodiversity Act, 2002.

Plant Discovery

- It is prepared by the Botanical Survey of India (BSI) and released by the Environment Ministry since 2007.
- It is a document on new species and new records of flora.

Botanical Survey of India

- It was established in 1890 with objective to explore plant resources of country and to identify plants species with economic virtues.
- Headquartered in Kolkata, the BSI has 9 regional circles at different regions of the country.
- BSI is the apex research organization under the Environment Ministry for carrying out taxonomic and floristic studies on wild plants of India.
- It serves the nation by providing scientific basis for conservation and sustainable use of

wild plant diversity through survey, documentation, taxonomic research and environmental awareness.

Key National Survey Organizations of India

Survey Organisation	Area of Focus
National Institute of Oceanography	Oceanography
Archeological Survey of India	Archaeology
Botanical Survey of India	Plants
Zoological Survey of India	Animals
Forest Survey of India	Forest resources
Fisheries Survey of India	Fisheries
Geological Survey of India	Geology
Indian Institute of Ecology and Environment	Ecology
Registrar General & Census Commissioner of India	Census of Indi
Survey of India	Cartography

Deepor Beel Wildlife Sanctuary

Environment Ministry has notified that the Deepor Beel Wildlife Sanctuary, Assam as an ecosensitive zone.

- Deepar Beel is a permanent freshwater lake in a former channel of the Brahmaputra River, to the south of the main river.
- It is Assam's only Ramsar site besides being an Important Bird Area.
- It has for decades been threatened by a railway track, a garbage dump, and encroachment from human habitation and commercial units.
- The sanctuary's "guardian village" is Chakardeo.
- To know about the impacts of notification of a region as an eco-sensitive zone, <u>click here</u>.

QSim Toolkit

Quantum Computer Simulator (QSim) Toolkit was launched by the Ministry of Electronics & Information Technology (MeitY).

- QSim is a first-of-its-kind indigenously developed toolkit that helps in learning and understanding the practical aspects of programming using Quantum Computers.
- It is an outcome of the 'Design and Development of Quantum Computer Toolkit (Simulator, Workbench) & Capacity Building' project.
 - \circ This project is being executed collaboratively by IISc Bangalore, IIT Roorkee and C-DAC with the support of MeitY.
- QSim provides a platform to acquire the skills of '**programming'** (Quantum Code) as well as 'designing' real Quantum Hardware.
- It enables the researchers and students to carryout research in Quantum computing in a cost effective manner.
- **Features** QSim offers a QC Simulator integrated with a GUI based Workbench allowing people to create Quantum programs.
- QSim helps simulate Quantum circuits with and without noise and test how well various algorithms work with imperfect quantum components.
- It has pre-loaded Quantum programs and algorithms providing a head start to the users.

- Quantum simulations performed on HPC resources will allow multiple users to submit jobs simultaneously with different QuBit configurations.
- QSim Offering Models
 - 1. PARAM SHAVAK QSim Standalone system with Quantum Simulator in a box
 - 2. PARAM QSim Cloud Available on cloud using HPC infrastructure PARAM SIDDHI AI (developed under NSM program).

BH-Series

Ministry of Road Transport & Highways has introduced a new registration mark for new vehicles i.e. Bharat series (BH-series).

- This series will help in the **vehicle re-registration process** while moving from one state to another state.
- **Need for new registration** Under section 47 of the Motor Vehicles Act, 1988, a person is allowed to keep the vehicle for not more than 12 months in any state other than the state where the vehicle is registered.
- But a new registration with the new state- registering authority has to be made within the stipulated time of 12 months.
- A passenger vehicle user takes the following steps to re-register a vehicle,
 - 1. No Objection Certificate from the Parent State for assignment of a new registration mark in another state.
 - 2. Assignment of new registration mark after the road tax on prorata basis is paid in the new State
 - 3. Application for refund of road tax in parent State on pro rata basis.
- Registration Mark Format in BH-series that will facilitate seamless transfer of vehicles is YY BH #### XX.
 - $^{\circ}$ YY is the code for Year of 1st registration, BH is the code for Bharat Series, #### for 0000 to 9999, XX for Alphabets (AA to ZZ).
- A vehicle bearing this BH-series registration mark shall not require assignment of a new registration mark when the owner of the vehicle shifts from one State to another.
- This vehicle registration facility under "BH-series" will be available on voluntary basis to
 - 1. Defense personnel,
 - 2. Employees of Central & State Governments/ Central & State PSUs,
 - 3. Employees of private sector companies/organizations, which have their offices in 4 or more States/UTs.
- **Tax** Motor Vehicle Tax will be levied for 2 years or in multiple of 2.
- This scheme will facilitate free movement of personal vehicles across States/UTs of India upon relocation to a new State/UT.
- After completion of 14^{th} year, motor vehicle tax shall be levied annually which shall be $\frac{1}{2}$ of the amount charged earlier for that vehicle.
- It further said that 2% extra charge will be levied for diesel vehicles, while electric vehicles will be charged 2% less tax.

Source: PIB, The Hindu, The Indian Express, Hindustan Times, Live Mint

