

NEWSPAPER HIGHLIGHT

India has added 557 new species to its fauna, which includes 407 new species and 150 new records, reveals **Animal Discoveries 2020**, a document published recently by the Zoological Survey of India (ZSI). The number of faunal species in India has climbed to 1,02,718 species with the discovery of the new species. Among the new species, some interesting species discovered in 2020 are *Trimeresurus salazar*, a green pit viper discovered in Arunachal Pradesh; *Lycodon deccanensis*, the Deccan wolf snake discovered in Karnataka; and *Sphaerotheca Bengaluru*, a burrowing frog named after the city of Bengaluru. The list also includes *Xyrias anjaalai*, a deep water species of snake eel from Kerala; *Glyptothorax giudikyensis*, a species of catfish from Manipur; and *Clyster galateansis*, a species of scarab beetle from the Great Nicobar Biosphere.

A rare merging of three supermassive black holes has been spotted by a team of astrophysicists from the Indian Institute of Astrophysics (IIA), working with Professor Françoise Combes from the Paris Observatory. This is only the third time such an event has been observed and the findings were published as a letter in the journal *Astronomy and Astrophysics* in June. The team were observing the merging of two galaxies — NGC7733 and NGC7734 — in the earth's celestial neighbourhood when they detected unusual emissions from the centre of the latter and a curious movement of a large bright clump within it, having a different velocity than that of NGC7733. Inferring that this was a separate galaxy, the scientists named it NGC7733N.

Six months after a devastating flood of rock, ice and debris gushed down the Rishiganga river in Uttarakhand and killed at least 200 and severely damaged two hydropower projects, three Union Ministries, which initially had dissenting views on the future of hydroelectric power projects, have come to a consensus. According to an affidavit filed in the Supreme Court this month, as part of an ongoing case on the feasibility of hydroelectric projects in the aftermath of the 2013 Uttarakhand floods, seven projects have been allowed to complete construction primarily on the grounds that they

HARI SINGH NALWA

1. Afghanistan, which has earned the name of graveyard of the empires, could not be controlled by anyone completely. But Hari Singh Nalwa, a legendary Sikh commander, tamed the turbulent forces at play in Afghanistan and earned the reputation of the most feared Sikh warrior there.

2. Who was Hari Singh Nalwa? He was a **commander in Maharaja Ranjit Singh's force**. He remained Governor of Kashmir, Hazara and Peshawar. He defeated various Afghans and established control over various regions along the boundary of Afghanistan. He, thus, prevented Afghans from entering Punjab through Khyber pass, which was the main route to enter India by the foreign invaders from 1000 AD till early 19th century.

3. Legacy: **Afghanistan was called the unconquered region and it was Hari Singh Nalwa who prevented Afghans from ravaging the North-West Frontier for the first time by taking control over several regions along the Afghanistan border and Khyber pass**. He had defeated thousands of Hazars, a tribe of Afghanistan, with less than three times their strength. For his bravery and ferocity, the government of India released a stamp on the name of Nalwa in 2013.

4. Battles in which he participated: 1807 Battle of Kasur (now in Pakistan): He defeated Afghani ruler Kutab-ud-din Khan. **Battle of Attock (in 1813)** Nalwa along with other commanders won against Azim Khan and his brother Dost Mohammad Khan, who fought on behalf of Shah Mahmud of Kabul and this was the first major victory of the Sikhs over the Durrani Pathans. **1818 Battle of Peshawar**: Nalwa took control over Jamrud in 1837, a fort at the entryway to Afghanistan through Khyber Pass.

HARYANA'S NEW LAND LAW

1. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Haryana Amendment), Bill, 2021 was recently passed by Haryana Assembly. It seeks to expedite development projects by simplifying the procedure for acquisition of land. However, the Bill has been criticised for allegedly being "anti-farmer" and promoting "crony capitalism".

2. Controversial provisions in the new Bill: **It has brought Public-Private Partnership (PPP) projects to the 'exempt' category, for which Social Impact Assessment (SIA)/ consent of landowners is not rerequired. This goes against the Central Land Acquisition Act of 2013 under which Social Impact Assessment (SIA)/ consent of landowners is a must**. The Bill seeks to do away with the condition of 48-hour prior notice to the occupants of an acquired building to evacuate. Occupants would be liable to vacate the building immediately after the Collector announces the award.

3. This is extremely draconian and arbitrary. The state machinery shall be armed with powers to throw out the belongings of an affected person even at midnight without any notice or redress. The amendments also do away with the provision to give the evicted people plots of land in addition to monetary compensation.

4. The Collector can determine the fair compensation and make the award without further enquiry if he is satisfied that all persons interested in the land have consented to the terms and conditions of their free will. In such a situation, tenants and poor persons who may have non-proprietary rights on the land are likely to lose out. Also, the share of female heirs is often not recorded in rural areas. And persons with right of access, such as among the co-sharers of a Khewat, and usufructuary rights as in a mortgage or easement rights of an owner, are not duly recorded in official records.

5. Exempted projects include: Projects vital to national security or defence of India; rural infrastructure including electrification; affordable housing, housing for the poor and for rehabilitation of persons displaced due to land acquisition or a natural calamity.

MALABAR EXERCISE OF QUAD NATIONS

were over “50% complete.”

Union Finance Minister Nirmala Sitharaman will soon chair a meeting of the Financial Stability and Development Council (FSDC) to nudge financial regulators to relax and harmonise investment norms for instruments such as Infrastructure Investment Trusts (InvITs) to be used to monetise public assets such as highways, gas pipelines and railway tracks.

The Ministry of Environment, Forest and Climate Change notified the eco-sensitive zone of Deepar Beel Wildlife Sanctuary on the southwestern edge of Guwahati. Beel's water has become toxic and lost many of its aquatic plants that elephants would feed on. The wetlands can breathe easier only if the railway track is diverted. Deepar Beel is one of the largest freshwater lakes in Assam and the State's only Ramsar Site, besides being an Important Bird Area.

There is no clarity on ‘any entity’ forming a government in Afghanistan, India was waiting to see how inclusive would the next government in Kabul be. The situation on the ground was “uncertain”.

Opposition leaders raised queries about the internal security concerns for India, the issue of Jammu and Kashmir and the Citizenship Amendment Act (CAA) during the briefing on Thursday by External Affairs Minister S. Jaishankar on the developments in Afghanistan after the Taliban takeover.

The Odisha government has proposed to achieve adoption of 20% battery electric vehicles in all vehicle registrations by 2025. The State Cabinet chaired by Chief Minister Naveen Patanik approved Odisha Electricity Vehicle Policy, 2021.

As many as 200 MPs from both ruling and opposition parties have visited Ladakh in the last two months, reflecting the importance that the government attaches to the region, Lok Sabha Speaker Om Birla. Inaugurating the Parliamentary Outreach Programme for the Empowerment of Panchayati Raj Institutions.

1. Navies of the four member nations of the Quadrilateral Security Dialogue, or the Quad — India, the United States, Japan, and Australia — are participating in the 25th edition of the Malabar Exercise, which began off the coast of Guam in the Pacific Ocean on August 26. Overview of Malabar: Malabar began as a bilateral naval exercise between India and the U.S. in 1992, and was expanded into a trilateral format with the inclusion of Japan in 2015.

2. Quad grouping—The quadrilateral formation includes Japan, India, United States and Australia. All four nations find a common ground of being the democratic nations and common interests of unhindered maritime trade and security. The idea was first mooted by Japanese Prime Minister Shinzo Abe in 2007. However, the idea couldn't move ahead with Australia pulling out of it.

3. Significance of the grouping: Quad is an opportunity for like-minded countries to share notes and collaborate on projects of mutual interest. Members share a vision of an open and free Indo-Pacific. It is one of the many avenues for interaction among India, Australia, Japan and the US and should not be seen in an exclusive context.

4. Why is China concerned about these developments? Beijing has long opposed a coalition of democracies in the Indo-Pacific region. It sees the maritime Quadrilateral as an Asian-NATO that seeks only to contain China's rise. Also, at a time of strained bilateral ties with China, India's intention to involve Australia in the Malabar drill could only be construed as a move directed against Beijing.

LiDAR

1. In its first major step towards mapping the jurisdiction of the entire stretch of the SoU Area Development Authority (SOUADA), the Gujarat government is employing the drone-based aerial Light Detection and Ranging (LiDAR) and photogrammetry technology. The technology will map with laser precision the exact contours, natural structures to buildings, including their cracks from the top with precision.

2. It is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

3. LiDAR follows a simple principle — throw laser light at an object on the earth surface and calculate the time it takes to return to the LiDAR source. Given the speed at which the light travels (approximately 186,000 miles per second), the process of measuring the exact distance through LiDAR appears to be incredibly fast. A lidar instrument principally consists of a laser, a scanner, and a specialized GPS receiver. Airplanes and helicopters are the most commonly used platforms for acquiring lidar data over broad areas.

KILAUEA VOLCANO

1. Kilauea is an active shield volcano in the Hawaiian Islands.

2. Historically, it is the most active of the five volcanoes that together form the Big Island of Hawaii.

3. Scientists have warned that the mountain could once again disgorge lava. Kilauea has erupted 34 times since 1952.

CHILDREN CLIMATE RISK INDEX: UNICEF

1. The United Nations Children's Fund (UNICEF) in collaboration with Fridays for Future launched a report named ‘The Climate Crisis Is a Child Rights Crisis: Introducing the Children's Climate Risk Index’. It is the first comprehensive analysis of climate risk from a child's perspective.

2. It ranks countries based on children's exposure to climate and environmental shocks, such as Cyclones and Heatwaves, as well as their vulnerability to those shocks, based on their access to essential services.

3. Pakistan (14th), Bangladesh (15th), Afghanistan (25th) and India (26th) are among four South Asian countries where children are at extremely high risk of the impacts of the climate crisis.

CROP INSURANCE

1. The domestic general insurance companies are gradually reducing their exposure to the Pradhan Mantri Fasal Bima

President Recep Tayyip Erdogan on said Turkey has held its first talks with the Taliban in Kabul, adding that Ankara was still assessing the Islamist group's offer to run the Afghan capital's airport. Mr. Erdogan said the Taliban now wanted to oversee security at the airport, while offering Ankara the option of running its logistics.

Yojana (PMFBY) to cut down their losses on account of high claims even as the Centre made the scheme optional and slashed its contribution. PMFBY and the Restructured Weather Based Crop Insurance Scheme (RWBCIS) were revamped in 2020.

2. About the Pradhan Mantri Fasal Bima Yojana (PMFBY): **Launched in 2016 and is being administered by the Ministry of Agriculture and Farmers Welfare.** Replaced the National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS). Aim: To provide a comprehensive insurance cover against the failure of the crop thus helping in stabilising the income of the farmers.