

### NEWSPAPER HIGHLIGHT

Moths are vital to pollination in the Himalayan ecosystem of northeast India, reveals a recent study. The study establishes 91 species of moths as potential pollinators of 21 plant families in Sikkim and Arunachal Pradesh in the north eastern Himalayas. The results assume significance as a majority of the pollination related studies are based on diurnal pollinators (bees and butterflies) and the role of nocturnal pollinators have so far received less scientific attention.

Observations showing a roughly doughnut shaped cloud of cosmic dust and gas shrouding a huge black hole at the heart of a galaxy similar in size to our Milky Way are providing scientists with new clarity about the universe's most energetic objects. Scientists said on Wednesday that their observations involving the supermassive black hole at the centre of galaxy Messier 77 and its surrounding cloud lend support to predictions made three decades ago about what are called "active galactic nuclei."

Variations in the genes for the newly discovered scent receptors for musk and underarm odour add to a growing body of research suggesting that humans' sense of smell is gradually becoming less sensitive (PLOS Genetics). Scientists can combine differences in scent perception with a person's genetics to discover the role of various scent receptors.

Astronomers of National Centre of Radio Astrophysics (NCRATIFR) in Pune and the University of California in the U.S. have used the Giant Metrewave Radio Telescope (GMRT) to map the distribution of atomic hydrogen gas from the host galaxy of a fast radio burst (FRB) for the first time. Fast radio bursts are extremely bright radio pulses from distant galaxies that last for only a few milliseconds, and though they were first detected fifteen years ago and over a thousand have been found so far, researchers still don't know what kind of astronomical objects can produce so much energy in so little time.

A study of fruit flies (*Drosophila*) published in Nature finds that they have more advanced cognitive abilities that was believed previously. Using immersive virtual

### WHAT IS ACCREDITATION, AND HOW DOES IT HELP AN EDUCATIONAL INSTITUTION?

1.The National Assessment and Accreditation Council (NAAC) has relaxed the eligibility criteria for accreditation of higher educational institutions. Need for: The purpose of the change, according to the guidelines, is to "widen the horizon of accreditation".

2.Rules for accreditation? Under the rules before the new guidelines were issued, only higher education institutions that are at least six years old, or from where at least two batches of students have graduated, could apply for accreditation with NAAC. The accreditation is valid for five years. Aspiring institutes need to be recognised by the UGC and have regular students enrolled into their full-time teaching and research programmes. Distance education units and offshore campuses are not covered under the accreditation process.

3.Accreditation-**Accreditation is a quality check exercise. It checks whether an institution meets certain standards of quality set by the evaluator in terms of curriculum, faculty, infrastructure, research and financial well-being among others.** Based on these parameters, the NAAC gives institutions grades ranging from A++ to C. If an institution is graded D, it means it is not accredited.

4.Benefits of accreditation: Apart from recognition, being accredited also helps institutions attract capital as funding agencies look for objective data for performance funding. It helps an institution know its strengths, weaknesses, and opportunities through an informed review process. Accreditation helps students going for higher education abroad as many global higher education authorities insist on recognition and accreditation of the institution where the student has studied.

5.What will the new guidelines change? Under the new manual, colleges and universities that have completed even one academic year will be eligible to apply for a newly created category of 'Provisional Accreditation for Colleges' or PAC. The PAC, which will not offer any grading, will be valid for two years, and institutions cannot get it more than two times.

### G20 SUMMIT

11.The Union Cabinet has set in motion the process to build a Secretariat that will look after the affairs of organising the G20 summit in 2023. India will steer the international body as its President from December 1, 2022 to November 30, 2023, which will lead to the G20 summit to be hosted here.

2.Proposed G20 Secretariat: G20 Secretariat is being established to handle work relating to substantive/knowledge/content, technical, media, security and logistical aspects of India's G20 Presidency. It will be manned by officers and staff from the Ministry of External Affairs, Ministry of Finance, and other relevant line Ministries/Departments and domain knowledge experts. The Secretariat will be functional till February 2024.

3.G20-The G20 is an annual meeting of leaders from the countries with the largest and fastest-growing economies. Its members account for 85% of the world's GDP, and two-thirds of its population. The G20 Summit is formally known as the "Summit on Financial Markets and the World Economy".

4.Establishment: **After the Asian Financial Crisis in 1997-1998, it was acknowledged that the participation of major emerging market countries is needed on discussions on the international financial system,** and G7 finance ministers agreed to establish the G20 Finance Ministers and Central Bank Governors meeting in 1999.

5.Presidency: The group has no permanent staff of its own, so every year in December, a G20 country from a rotating region takes on the presidency. That country is then responsible for organising the next summit, as well as smaller meetings for the coming year. They can also choose to invite non-member countries along as guests. The first G20 meeting took place in Berlin in 1999, after a financial crisis in East Asia affected many countries around the world.

6.Full membership of the G20: **Argentina, Australia, Brazil,**

reality environment, neurogenetic manipulations and real time monitoring of brain activity, the researchers found many similarities between fruit flies and mammals by way of cognitive abilities.

In a population of Colorado blue columbines, researchers observed that flowers lost some of their petals and their characteristic nectar spurs due to a specific mutation, according to a study published in *Current Biology*. The researchers infer that these types of change are examples of evolution that happens in jumps and not in gradual steps as Darwin envisaged.

The India-UAE Free Trade Agreement (FTA) will come into effect after the United Arab Emirates completes the official processes on its side, said Commerce Secretary B.V.R. Subrahmanyam on Saturday. At a press interaction, the official said the the FTA will ensure advantage for exports and is likely to prompt Indian owned jewellery businesses to shift back to the country. "We are expecting a maximum of 60 days before the Comprehensive Economic Partnership Agreement comes into effect, he said.

West Bengal Governor Jagdeep Dhankhar returned the recommendation of Chief Minister Mamata Banerjee to summon the Assembly on March 7. Mr. Dhankhar took to social media and said that he had returned the recommendation for "constitutional compliance". "Hon 'ble CM Mamata Banerjee recommendation to summon Assembly on March 7 had to be returned for constitutional compliance as Guv [Governor] summons assembly on the recommendation made by the Cabinet, not only the Chief Minister after due compliance of Rules of Business under article 166(3) of constitution," the Governor said in a tweet.

Russia's President Vladimir Putin launched exercises by strategic nuclear missile forces on Saturday, as Washington said Russian troops massed near Ukraine's border were "poised to strike". U.S. President Joe Biden said he is convinced that Mr. Putin had decided to attack Ukraine.

Breaking barriers, Dalit youth in Rajasthan are challenging social customs and asserting their rights guaranteed by the Constitution. One of the oppressive customs forbade them from riding a horse on their big day during the procession to the bride's house. Not so now, as the

Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States and the European Union.

#### PRIVATE SECTOR QUOTA LAW

1.The Supreme Court has set aside the Punjab and Haryana High Court order staying a controversial State law which provides 75% reservation for local youths in private sector jobs earning less than ₹30,000 a month. The story so far: The Haryana government has ordered that the law (the Haryana State Employment of Local Candidates Bill) providing for 75% reservation for locals in private sector jobs will come into force from January 15, 2022. However, the Punjab and Haryana High Court stayed the law.

2.Why did the Supreme Court lift the stay? The Bench observed that every law passed by legislature was presumed to be legal. An order of stay of their implementation by a court of law should be reasoned. The High Court had not given sufficient reasons for stopping the Haryana law in its tracks on February 3.

3.Highlights of the law: The law provides for 75% reservation in private sector jobs to those having a resident certificate (domicile). **The law will be applicable for a period of 10 years. Jobs with a gross monthly salary of not more than ₹30,000 will be up for hiring from among local candidates.**

4.Legal issues in such laws? The question of domicile reservation in jobs: While domicile quotas in education are fairly common, courts have been reluctant in expanding this to public employment. It raises questions relating to the fundamental right to equality of citizens. The issue of forcing the private sector to comply with reservations in employment. **For mandating reservation in public employment, the state draws its power from Article 16(4) of the Constitution.** But, the Constitution has no manifest provision for private employment from which the state draws the power to make laws mandating reservation. It may not be able to withstand judicial scrutiny on the touchstone of Article 19(1)(g).

#### DRAFT LAW ON REFUGEE RIGHTS

1.The NHRC recently held a discussion on "protection of the basic human rights of refugees and asylum seekers in India". During the meet, the participants expressed concern over the issue of India not having a specific law for refugees and asylum-seekers. It was also suggested that model laws on asylum and refugees that were drafted by the National Human Rights Commission (NHRC) decades ago but not implemented by the government could be revised by an expert committee.

2.Need for a law in this regard: The refugees and asylum seekers were entitled to the rights in Articles 14, 20 and 21 of the Constitution. Therefore, it becomes the responsibility of the state to protect these rights. There was a lack of clarity for law enforcement agencies as well. If such laws were enacted, it would give legal sanctity and uniformity, ensuring the protection of human rights.

3.Key suggestions made: Update the two old NHRC documents regarding the domestic asylum laws and model law for refugees. Constitute a panel/committee of scholars and domain experts to update these draft laws.

4.About the Refugee Convention 1951: **It is a United Nations multilateral treaty that defines who is a refugee, and sets out the rights of individuals who are granted asylum and the responsibilities of nations that grant asylum.** The Convention grants certain rights to people fleeing persecution because of race, religion, nationality, affiliation to a particular social group, or political opinion.

#### AUKUS ALLIANCE

1.China has equated the India, U.S., Australia, Japan Quad grouping with the AUKUS (Australia, U.K., U.S.) defence pact, calling both "exclusive cliques" part of the Biden administration's "ill-intentioned" Indo-Pacific strategy. It said, this 'strategy' resurrects the Cold War mentality and will only bring division and turbulence to the Asia-Pacific.

2.About the AUKUS Pact: The UK, US and Australia, in 2021, announced a historic security pact in the Asia-Pacific, in what's seen as an effort to counter China. It is called the AUKUS pact and AUKUS alliance. Under the AUKUS alliance, the three nations have agreed to enhance the development of joint capabilities and technology sharing, foster deeper integration of

**police and the district administration stand behind them in support as young men in their wedding finery mount the horses.**

**The number of airport lounges in India is expected to increase to 7090 by calendar year 2025, to 150-160 by 2030 and to 193 by 2040, as per separate estimates from FICCI, Ministry of Civil Aviation and Frost & Sullivan research. The number of cities with more than two airports in India is expected to be 8, 16 and 31 in the same timelines, respectively. Passenger numbers are expected to rise to 29.3 crore, 56.7 crore and 111.4 crore, respectively. Industry revenues are also expected to grow to \$16.9 billion, \$20.8 billion and \$28.6 billion by these years, respectively. The total number of operational airports is expected to reach 295 by 2040.**

security and defence-related science, technology, industrial bases and supply chains. Under the first major initiative of AUKUS, Australia would build a fleet of nuclear-powered submarines with the help of the US and the UK, a capability aimed at promoting stability in the Indo-Pacific region.

**3.China's response:** China has condemned the agreement as "extremely irresponsible". Concerns raised by China: The Alliance undermines regional peace and stability and intensifies the arms race. It shall reinvent a "Cold War mentality and ideological prejudice".