



This handout from the World Wide Fund For Nature (WWF) shows the *Trachypithecus popa* of the Popa langur species walking in the North Zamari Wildlife Sanctuary (NZWS) in Myanmar's Bago region. — AFP photos



This handout photo shows the *Cyrtodactylus phnomchiensis* bent-toed gecko in Phnom Chi in the Prey Lang Wildlife Sanctuary in Cambodia.



This handout photo shows the *Megophrys frigida* or Mount Ky Quan San horned frog in the Bat Xat Nature Reserve on Mount Ky Quan San in Vietnam.



This handout photo shows a camera trap being set up in an undisclosed location in Myanmar.

More than 200 new species found in Mekong region

Scientists discovered more than 200 new species across the greater Mekong region in 2020, according to a WWF report, despite the threats posed by climate change and human activities such as logging. The finds include a new primate, a colorless cavefish and an iridescent snake with an unusual non-overlapping pattern of scales.

In all, 224 new species of plants and vertebrate animals were found in the region—which includes Myanmar, Thailand, Laos, Cambodia and Vietnam—WWF said in its “New Species Discoveries” report. Images

of the Popa langur monkey, which takes its name from the extinct volcano Mount Popa in central Myanmar, were caught by camera traps. The mountain is still home to the largest population of the reclusive simian, around 100 individuals, WWF said.

Only around 200 to 250 of the monkeys—which are threatened by hunting, logging and loss of habitat—are thought to survive in total. In Vietnam, researchers found the vivid-colored Mount Ky Quan San horned frog at an altitude of more than 2,000 meters (6,500 feet) on the peak which gives it its name. The greater Mekong region, with

landscapes ranging from jungles to mountains and karst formations, is a hugely important biodiversity hotspot.

It is home to some of the world's most impressive and most endangered species including the tiger, the Asian elephant and the Mekong giant catfish. WWF have said the rate of discovery of new species—more than 3,000 since 1997 — shows the importance of preserving the region's fragile ecosystems. — AFP



This handout photo shows the *Pareas geminatus* slug snake in Long Tien in Laos' Xaisomboun.



This handout photo shows the *Capparidaceae* plant of the caper bush family in the Nam Kading National Protected Area in Laos' Bolikhamxay province.

Object found in the Milky Way 'unlike anything astronomers have seen'

Australian researchers have discovered a strange spinning object in the Milky Way they say is unlike anything astronomers have ever seen. The object, first spotted by a university student working on his undergraduate thesis, releases a huge burst of radio energy three times every hour. The pulse comes “every 18.18 minutes, like clockwork,” said astrophysicist Natasha Hurley-Walker, who led the investigation after the student's discovery, using a telescope in the Western Australian outback known as the Murchison Widefield Array.

While there are other objects in the universe that switch on and off—such as pulsars—Hurley-Walker said 18.18 minutes is a frequency that has never been observed before. Finding this object was “kind of spooky for an astronomer,” she said, “because there's nothing known in the sky that does that.” The research team is now working to understand what they have found. Trawling back through years of data, they have been able to establish a few facts: the object is about 4,000 light-years from Earth, is incredibly bright and has an extremely strong magnetic field.



This undated handout image shows the Milky Way as viewed from Earth, with a star icon (at R-placed by source) marking the position of a mysterious repeating transient in space. — AFP

But there are still many mysteries to untangle.

“If you do all of the mathematics, you find that they shouldn't have enough power to produce these kind of radio waves every 20 minutes,” Hurley-Walker said. “It just shouldn't be possible.” The object may be something researchers have theorized could exist but have never seen called an “ultra-long period magnetar”. It could also be a white dwarf, a remnant of a collapsed star. “But that's quite unusual as well. We only know of one white dwarf pulsar, and nothing as great as this,” Hurley-Walker said. “Of course, it could be something that we've never even thought of—it could be some entirely new type of object.” On the question of whether the powerful, consistent radio signal from space could have been sent by some other life form, Hurley-Walker conceded: “I was concerned that it was aliens.”

But the research team was able to observe the signal across a wide range of frequencies. “That means it must be a natural process, this is not an artificial signal,” Hurley-Walker said. The next step for the researchers is to look for more of these strange objects across the universe. “More detections will tell astronomers whether this was a rare one-off event or a vast new population we'd never noticed before,” Hurley-Walker said. The team's paper on the object has been published in the latest edition of the journal *Nature*. — AFP

Three, two, one: Astronomers predict SpaceX space junk will hit the Moon

A chunk of a SpaceX rocket that blasted off seven years ago and was abandoned in space after completing its mission will crash into the Moon in March, experts say. The rocket was deployed in 2015 to put into orbit a NASA satellite called the Deep Space Climate Observatory (DSCOVR). Since then, the second stage of the rocket, or booster, has been floating in what mathematicians call a chaotic orbit, astronomer Bill Gray told AFP Wednesday. It was Gray who calculated the space junk's new collision course with the Moon.

The booster passed quite close to the Moon in January in a rendezvous that altered its orbit, said Gray. He is behind Project Pluto, software that allows for calculating the trajectory of asteroids and other objects in space and is used in NASA-financed space observation programs. A week after the rocket stage whizzed close to the Moon, Gray observed it again and concluded it would crash into the Moon's dark side on March 4 at more than 5,500 miles per hour (9,000 kilometers per hour). Gray appealed to the amateur astronomer community to join him in observing the booster, and his conclusion was confirmed.

The exact time and spot of impact may change slightly from his forecast but there is widespread agreement that there will be a collision on the Moon that day. “I've been tracking junk of this sort for about 15 years. And this is the first unintentional lunar impact that we've had,” Gray told AFP.

'Time to start regulating'

Astronomer Jonathan McDowell told AFP it's possible similar impacts have taken place unnoticed. “There're at least 50 objects that were left in deep Earth orbit in the '60s, '70s and '80s that were just abandoned there. We didn't track them,” he said. “Now we're picking up a couple of them... but a lot of them we're not finding and so they're not there anymore,” he

added. “Probably at least a few of them hit the moon accidentally and we just didn't notice.”

The impact of the SpaceX rocket chunk weighing four tons on the Moon will not be visible from Earth in real time. But it will leave a crater that scientists will be able to observe with spacecraft and satellites like

stage is recovered and reused. Gray said there could be more unintentional crashes into the Moon in the future as the US and Chinese space programs in particular leave more junk in orbit.

The US together with international partners is already planning a space station to orbit the Moon. McDowell noted these



This NASA handout file photo shows NOAA's DSCOVR satellite launching from Cape Canaveral Air Force Station in Florida. — AFP

NASA's Lunar Reconnaissance Orbiter or India's Chandrayaan-2, and thus learn more about the geology of the Moon.

Spacecraft have been intentionally crashed into the Moon before for scientific purposes, such as during the Apollo missions to test seismometers. In 2009, NASA sent a rocket stage hurtling into the Moon near its south pole to look for water. But most rockets do not go so far from Earth. SpaceX brings its rocket boosters back through the Earth's atmosphere so they disintegrate over the ocean. The first

events “start to be problematic when there's a lot more traffic.” “It's actually no one's job to keep track of the junk that we leave out in deep earth orbit,” he added. “I think now's the time to start regulating it.” SpaceX did not immediately respond to request for comment from AFP. Elon Musk's company is currently developing a lunar lander that should allow NASA to send astronauts back to the Moon by 2025 at the earliest. — AFP