

IN BRIEF



Mediterranean sharks face risk of 'disappearing'

PARIS
Sharks are at risk of disappearing from the Mediterranean as overfishing and plastic pollution choke populations of the endangered hunters, warns a report by World Wildlife Fund (WWF). More than half of shark and ray species in the Mediterranean are under threat, it says. **AFF**



Bull festival in Spain ends with 3 gorings

PAMPLONA
A bull broke from the pack and gored two Australians and a Spaniard during Sunday's final bull run of this year's San Fermin festival. That took the number of gorings to eight for the eighth bull runs. **AP**

India is home to 1,256 species of orchid, says first comprehensive survey

Orchids of India: A Pictorial Guide, which was published recently, puts the total number of species endemic to India at 388

SHIV SAHAY SINGH
KOLKATA

The Botanical Survey of India has come up with the first comprehensive census of orchids of India putting the total number of orchid species or taxa to 1,256.

Orchids of India: A Pictorial Guide, a publication detailing all the species of India was unveiled earlier this month by the Ministry of Environment, Forest and Climate Change.

The 1,256 species or taxa of orchids belong to 155 genera and 388 species are endemic to India. The publication, authored by Paramjit Singh, former director of BSI, A.A. Mao the present director of the institute, scientists S.S. Dash, S.K. Singh, D.K. Agarwala and J.S. Jalal, also contains photographs of 775 species.

Three life forms

Orchids can be broadly categorised into three life forms: epiphytic (plants growing on another plants including



(From left) *Pleione maculata*, an epiphytic orchid; *Cymbidium lancifolium*, a terrestrial orchid; and *Aerides odorata*, an epiphytic orchid. ***SPECIAL ARRANGEMENT**

those growing on rock boulders and often termed lithophyte), terrestrial (plants growing on land and climbers) and mycoheterotrophic (plants which derive nutrients from mycorrhizal fungi that are attached to the roots of a vascular plant). About 60% of all orchids found in the country, which is 757 species, are epiphytic, 447 are terrestrial and 43 are mycoheterotrophic.

The epiphytic orchids are abundant up to 1800 m

above the sea level and their occurrence decreases with the increase in altitude. Terrestrial orchids, which grow directly on soil, are found in large numbers in temperate and alpine region whereas mycoheterotrophic orchids, mostly associated with ectomycorrhizal fungi, are found in temperate regions, or are found growing with parasites in tropical regions.

A State-wise distribution of orchid species point out that the Himalayas, North-

East parts of the country and Western Ghats are the hotspots of the beautiful plant species.

State-wise distribution

The highest number of orchid species is recorded from Arunachal Pradesh with 612 species, followed by Sikkim 560 species and West Bengal; Darjeeling Himalayas have also high species concentration, with 479 species.

While north-east India

rank at the top in species concentration, the Western Ghats have high endemism of orchids.

There are 388 species of orchids, which are endemic to India of which about one-third (128) endemic species are found in Western Ghats. The publication points out that Kerala has 111 of these endemic species while Tamil Nadu has 92 of them. Among the 10 bio geographic zones of India, the Himalayan zone is the richest in terms of or-

chid species followed by

Northeast, Western Ghats, Deccan plateau and Andaman & Nicobar Islands. "The publication is the result of years of hard and methodical research through careful examination of protologues, literature and voucher herbarium specimens. Every record has been verified from published floras, revisionary works, doctoral thesis and scientific papers," Mr. Mao said.

Considering the impor-

tance of orchids in floriculture, the publication, which has photographs of 60% of all species, is the first authentic inventory and will be useful for researchers, growers, nature lovers and people with different backgrounds, Mr. Mao said.

Marked by extremely beautiful flowers with unique shape and ornamentation, orchids have complex floral structure that facilitates biotic cross-pollination and makes them evolutionarily superior to the other plant groups.

Another interesting factor is that the entire orchid family is listed under appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and hence any trade of wild orchid is banned globally.

"Some of the orchids like *Dendrobium*, *Phalaenopsis*, *Oncidium* and *Cymbidium* are quite popular in floriculture trade," Mr. Dash, an author said.

53 years on, Bareilly to get its jhumka

INDO-ASIAN NEWS SERVICE
BAREILLY

Bareilly shot to fame in 1966 when the late Bollywood actress Sadhana danced to the song *Jhumka gira re, Bareilly ke bazaar mein* in the movie *Mera Saaya*.

The city, however, had no speciality in making or selling 'jhumkas' (ear danglers) and neither did it make any efforts to cash in on the popularity of the song. Finally, after over 53 years, Bareilly will get its 'jhumka', a symbolic replica of this piece of jewellery.

According to sources, the Bareilly Development Authority (BDA) has sought the approval of the National Highways Authority of India (NHAI) to install a 'jhumka' at the Parsakhera zero point.

The project was first conceived in the early 90s, but hit a roadblock due to paucity of funds and availability of a suitable location.

The BDA had even invited designs for the 'jhumka'. The replica will now come up at the entrance of the city on the Delhi-Bareilly road at Parsakhera.

BDA sources said that the proposed jhumka will be 2.43 m in diameter and 12-14 feet in height. The landscaping around the 'jhumka' is estimated to cost around ₹18 lakh. There will be three surma (kohl) bottles (inspired from the word 'surme daani' used in the song) surrounding the structure. Surma bottles will be kept in parapet walls, which will also have colourful lights installed there.

Besides, colourful stones and zari work, for which the city is famous, would be used for decoration.

Rainbow wave



Shattering boundaries: Members of LGBTQ community taking part in a Pride Parade in Bhopal on Sunday. ***A.M. FARUQUI**

Healthy lifestyle may offset genetic risk for Alzheimer's

Good diet, adequate exercise could make a big difference: study

ASSOCIATED PRESS
LOS ANGELES

A healthy lifestyle can reduce the risk of developing Alzheimer's or other forms of dementia even in the presence of genes that raise the risk for these mind-destroying diseases, says a study.

People with high genetic risk and poor health habits were about three times more likely to develop dementia when compared to those with low genetic risk and good habits, researchers reported on Sunday.

Regardless of how much genetic risk someone had, a good diet, adequate exercise, limiting alcohol and not smoking made dementia less likely.

"I consider that good news," said John Haaga of the U.S. National Institute on Ageing, one of the study's many sponsors.



Healthy habits include limiting alcohol and not smoking. ***ISTOCKPHOTO**

with no signs or symptoms of dementia at the start. Their genetic risk was classified as high, medium or low based on dozens of mutations known to affect dementia. They also were grouped by lifestyle factors.

About eight years of study, 1.8% of those with high genetic risk and poor lifestyles had developed dementia versus 0.6% of folks with low genetic risk and healthy habits.

Among those with the highest genetic risk, just over 1% of those with favourable lifestyles developed dementia compared to 2% of those with poor lifestyles.

One limitation - Researchers only had information on mutations affecting people of European ancestry, so it's not known whether the same is true for other racial or ethnic groups.

As ransomware rages, debate heats up on response

Globally, losses from malicious software rose by 60% last year to \$8 bn, according to latest data

AGENCE FRANCE-PRESSE
WASHINGTON

Services in the U.S. cities of Baltimore and Maryland were paralysed earlier this year when a ransomware attack locked up computer networks and made it impossible for residents to make property transactions or pay their municipal bills.

Officials refused to meet hacker demands for a ransom of \$76,000 to unlock the systems, but have been saddled with an estimated \$18 million in costs of restoring and rebuilding the city's computer networks.

The dilemma in such cases highlight tough choices

faced by cities, hospitals and corporations hit by ransomware.

Two Florida cities reportedly paid a total of \$1 million in ransom this year, after which a new attack by the same group hit the State court system in Georgia.

Globally, losses from ransomware rose by 60% last year to \$8 billion, according to data compiled by the Internet Society's Online Trust Alliance.

At least 170 county, city or State government systems have been hit since 2013, with 22 incidents this year, according to the U.S. Conference of Mayors, which



adopted a resolution opposing ransomware payments.

"We're seeing more attacks against cities because it's clear cities are ill-prepared," said Gregory Falco, a researcher at Stanford University.

Ransomware has been a thorny cybersecurity issue

for several years globally, marked by global ransomware attacks known as "WannaCry" and "NotPetya."

Pay or resist?

While the FBI and others warn against paying ransoms, some analysts say there is no clear answer for victims when critical data is locked. "You have to do what's right for your organisation," Mr. Falco said.

Josh Zelonis at Forrester Research offered a similar view, saying in a blog post that victims need to consider paying the ransom as a valid option, alongside other re-

covery efforts.

But Randy Marchany, chief information security officer for Virginia Tech University, said it's best not to pay.

Victims often fail to take preventive measures such as software updates and data backups that would limit the impact of ransomware.

"If the encryption in ransomware is implemented properly, there is a zero chance of recovery unless you pay the ransom," Brett Callow, of Emsisoft, said. "Often it isn't implemented properly, and we find weaknesses in the encryption and undo it."

Disney's *Lion King* takes a break from tradition

It was filmed in virtual reality



Animation roars: Red-billed hornbill Zazu and young lion Simba, right, in a scene from *The Lion King*. ***AP/DISNEY**

AGENCE FRANCE-PRESSE
LOS ANGELES

Disney's blockbuster 3D re-makes of classics have rampaged through box offices in recent years, but the studio is banking on its latest - *The Lion King* - to climb right to the top of the food chain.

With a star-studded voice cast, including Beyonce, and estimated \$250 million budget, Hollywood's reigning hitmaker has spared no expense bringing its beloved lion roaring to photorealistic life.

A trailer for the new *Lion King* was watched by 225 million people in its first 24 hours in November, shattering Disney's record.

Almost every shot was conjured from scratch using computer-generated imagery. And yet *The Lion King* is not strictly a 3D animation either, in any conventional sense.

It is instead something totally new, says director Jon Favreau - a film shot by a traditional camera crew, but entirely inside a virtual real-

ity 3D world.

Filmmakers and actors at the studio were able to don digital headsets and "step into" a video game-style African savannah to film rough computer-generated versions of Simba and his pals cavorting through the Pride Lands. "The crew would be able to put on the headsets, go in and scout and actually set cameras within VR," Mr. Favreau said.

The novelty was not lost on child actor JD McCrary, who voices the young Simba early in the film. "We saw everything, we saw the Pride Lands, Pride Rock, the watering hole... We saw it all man, and it was so cool!"

But this groundbreaking method had practical benefits that shape the way the film actually appears, according to Mr. Favreau.

In another break from tradition, the voice actors were recorded together on theatre stages, giving them free rein to improvise.

Czechs go crazy as pop singer Karel Gott turns 80

People queued to get their hands on 'Zero Euro', recognised by European Central Bank as souvenir banknote, depicting the pop icon

AGENCE FRANCE-PRESSE
PRAGUE

Hundreds of people from home and abroad queued in steady rain in central Prague Sunday to buy a "Zero Euro" souvenir banknote depicting Czech pop singer Karel Gott in honour of his 80th birthday.

The first fans and collectors arrived on Thursday to buy the zero-denomination banknote for the equivalent of €2 from special ATMs in the shop of a local record company.

"We arrived at 6:00 a.m. on Saturday. We slept in a sleeping bag on the pavement," said Lukas Gandzala,



A man shows 'Zero Euro' souvenir banknotes depicting Czech pop singer Karel Gott at a shop, in Prague. ***AFP**

who came from the northern Slovak city of Poprad, some 450 km from Prague.

"We collect the banknotes, the Zero Euro is a big phenomenon in our country,

and so is Karel Gott," he said, folding his umbrella to finally get inside the shop after his rain-drenched 26-hour wait.

Unlike Slovakia, with which it formed a single State until 1993, the Czech Republic has not yet introduced the euro and its government has no plans to replace its koruna currency in the near future.

Created by Frenchman Richard Faille in 2015 and authorised by the European Central Bank, the Zero Euro notes used solely as souvenirs have so far depicted well-known sites, such as the Eiffel Tower and the Big Ben, and people like Dutch pain-

ter Rembrandt van Rijn.

Dubbed "Divine Karel," Gott has been voted the most popular singer 42 times in the annual Golden Nightingale poll of Czech music fans.

Golden voice

Very popular also in neighbouring Germany, Gott has released almost 300 LPs and CDs, selling dozens of millions of them.

Relishing the singer's hits as well as the title song for the *Maya the Bee* children's TV series, German fans have dubbed Gott "the Golden Voice from Prague".

Born on July 14, 1939, Gott rose to stardom in the 1960s