

Science & Technology

Orphaned Thai baby dugong becomes conservation star

Mariam ignites interest to care about marine animals

TRANG, Thailand: Cuddles at feeding time are one of many techniques vets in Thailand are using to raise an orphaned baby dugong named Mariam, and which have helped spread interest in ocean conservation in the process. Found stranded on a beach in May at six months old, the ocean mammal has been receiving daily care from park officials, local conservation groups, and veterinarians at Phuket Marine Biological Centre.

Her star took off after photos showing her being cradled by the vets went viral on social media, and the Department of Marine and Coastal Resources (DMCR) has posted frequent updates on her condition. Vet Pathompong Kongjit said that Mariam—who now lives in the waters around Ko Libong island of Trang province—has become a symbol of the dire need for a clean-up in Thailand's plastic-choked seas.

"Mariam has ignited the interest among Thai people to care about marine animals, Thai seas and nature in general," he said. But so far, her biggest challenge is feeding herself, as she has trouble digging out the seagrass buried in the ocean floor. "Mariam can only eat the protruding seagrass," he said, adding that she's "getting better" at it. Female dugongs also usually breastfeed their babies while they are swimming—something the vets cannot do.



TRANG, Thailand: This picture shows Mariam the dugong as she is cared for by park officials and veterinarians from the Phuket Marine Biological Centre on Libong island, Trang province in southern Thailand. —AFP

"So we hold her while feeding her milk, and after that we have to get her to swim around to exercise her digestion system," Pathompong said. Her caretakers also use an orange canoe—nicknamed "Mother Orange"—for her to follow around in the water for exercise. Despite Mariam's

seeming dependence on her human friends, Pathompong said she's "learned to adjust to the environment" and no longer gets stranded on the beach. But "it doesn't matter how many marine animals we can save... if their sea homes are in bad conditions," said the vet, adding that Mariam

will likely be under their care for at least another year.

The avalanche of public interest in Mariam's progress has prompted the DMCR to set up a livestream for the growing baby, expected to be broadcast at the end of this week. Another baby

dugong was also found stranded in Krabi earlier this week. The Phuket Marine Biological Centre said in a statement that dugongs get stranded on beaches because of fishing and other human activities. Southern Thailand's waters are home to about 250 dugongs. —AFP

Bald eagles stir US patriotism as web-cam stars

WASHINGTON: On the brink of extinction a half-century ago, the bald eagle is thriving in the internet age, fascinating a devoted corps of Americans who regularly monitor the majestic birds of prey via web-cams set up at more than a dozen nests in the wild. The bald eagle, designated as the national emblem of the United States in 1782, has long symbolized the American ideal of freedom. For people like Kevin Fossett, a US Navy veteran who likes to check up on a nest in Florida, the sight of the birds stirs feelings of patriotism, especially with the approach of Independence Day.

Fossett said in recent years he has watched several eagle eggs as chicks inside peck through the shells and emerge as newborns, usually in the winter or early spring. By July 4, the eaglets typically have taken flight and left the nest. "Flying free, as they should be," said Fossett, 50. "Total independence, just like our national holiday." Fossett clicks on an "eagle-cam" daily using a tablet on his screen porch in St. Petersburg, Florida, or at his fishing equipment business. He watches a nest more than 220 miles away, near Jacksonville.

At least 15 cameras focused on bald eagle nests around the United States are streaming live images 24 hours a day, seven days a week, said Shawnlei Breeding, EagleWatch Program manager at the Audubon Center for Birds of Prey. "Bald eagles inspire a lot of passion in their fans," Breeding said. "They become like family to the people who watch them." The birds typically mate for life and use the same nest year after year to raise their young.

An eagle-cam in Decorah, Iowa, went viral in 2011 with 280 million views, and the site has drawn in many more over the years, said Amy Ries, spokeswoman for Raptor Resource Project, a non-profit organization that runs it. Seven eagle-cams at Explore.org saw a 223% increase in views in 2018 compared with 2017. High-definition images streamed from the roosts allow the eagle fans to see close-ups of the birds.

Viewers are able to count feathers, observe iris patterns or identify the bird's prey before it is consumed. "We can see the tiny eyelashes



NEW YORK: These pictures show an American Bald Eagle above the Hudson River, New York. — AFP photos



of an eagle," said Veronika Soul, 74, a retired filmmaker who lives in New York's Harlem neighborhood and watches two Decorah bald eagle nests daily. "We see things happen at nest level that people on the ground never see." The technology allows cameras to be rotated remotely, providing glimpses of life beyond the nest. Viewers say it is especially fun to see fledglings take their first flights.

Viewers of the Iowa nest recently saw an eaglet who was accidentally knocked off the nest. It managed to jump and flutter high enough up the branches of an adjacent tree to drop back into its family's nest. Pesticide poisoning and human encroachment on their habitat threatened eagles with extinction, with only an estimated 487 pairs remaining by

1963, according to the federal wildlife website.

After decades of federal protection, the eagle started a comeback. The turning point came in 1972 when the Environmental Protection Agency banned the pesticide DDT. The population has soared since then, and in 2007 the bald eagle was removed from the endangered list. Ten years ago, there were 143,000 bald eagles in the United States, according to a 2009 US Fish and Wildlife Service (FWS) survey, the most recent data available.

Updated numbers are expected to be released next year and preliminary data indicate the population is rising, said FWS spokeswoman Vanessa Kauffman. Most bald eagles are found in Alaska, while Minnesota, Wisconsin and Florida also have large populations, according to Breeding. Worldwide, the bald eagle population is 250,000, with 88 percent spending part of the year in the United States, 31 percent in Canada and 8 percent in Mexico, said Patricia Leonard, spokeswoman for Cornell Lab of Ornithology in Ithaca, New York.

Eagle-watching can be a source of patriotic pride or a therapeutic way to ease the pain of illness, loss and even dying, avian experts say. "In an eagle's nest, life goes on," Ries said. "When we look into the nest, we see something of ourselves staring back at us, but we also see something wild beyond our comprehension." — Reuters

potentially irreversible environmental harm both at the mine sites and throughout broader ocean areas," Greenpeace said in a report. "Opening up a new industrial frontier in the largest ecosystem on Earth and undermining an important carbon sink carries significant environmental risks ... Deep sea mining could even make climate change worse."

A growing number of countries are eyeing the ocean floor as a source of wealth, scattered with vast beds of minerals key to making modern gadgets, from smartphones to solar panels. But climate campaigners are worried about disrupting one of the last pristine areas of the planet and potentially putting species we barely understand at risk, as well as releasing planet-warming carbon dioxide.

India is investing heavily in underwater technology after winning four of 29 exploration licenses awarded by the UN's International Seabed Authority (ISA), which aims to agree rules on exploitation by 2020. N H Khadge, a scientist at India's National

Institute of Oceanography (NIO) that carries out sea floor surveys and tests environmental impacts of India's deep ocean exploration program, said Greenpeace's report was "exaggerated".

He said seabed operations would be significantly less harmful than mining on land, and that environmentally-friendly technologies were being developed in line with ISA guidelines. "It is not exploitation, it is friendly collection of the commercial deposits," he said. Greenpeace called on the UN to secure a strong Global Ocean Treaty, prioritizing conservation, at talks in New York next month about oceans beyond national boundaries — an area of global governance that experts say has been neglected.

Richard Mahapatra, managing editor of India's highly-regarded Down To Earth magazine, supported Greenpeace's stance. "In the absence of a binding global treaty, it will all be about individual interests," he said. "And that could ultimately lead to the destruction of our last frontier." —Reuters

Fox crosses Arctic to reach Canada from Norway in record time

OSLO: Covering some 3,500 kilometers over the polar ice sheets in only 76 days, an arctic fox has reached Canada after setting off from Norway in an unprecedented feat of endurance. The journey is not only a testament to the fox's stamina but also highlights the important role ice sheets serve for the migration of Arctic wildlife and the threat global warming poses to the ecological balance. Arnaud Tarrow, one of the researchers behind the study recording the fox's trek published by the Norwegian Polar Institute, warned that "less ice... will mean less opportunities for this type of migration".

The arctic fox was equipped with a

satellite tracker in July 2017 and set off from the island of Spitsbergen in the Norwegian Svalbard archipelago, about 1,000 kilometers from the North Pole, on March 26 2018. On June 10, 76 days after leaving Norway, the fox reached Ellesmere Island, one of Canada's northernmost communities, completing a journey of 3,506 kilometers. "This species is even more enduring and faster than what has been observed in the past," Arnaud Tarrow told AFP Wednesday.

"It's a young female, less than a year old, therefore relatively inexperienced, literally going out to discover the world and surviving an Arctic crossing on her first attempt," he continued. Adding to the impressive feat is that the young vixen covered the first 1,512 kilometers to reach Greenland in just 21 days. "This is the first observation that shows in detail that an arctic fox has migrated between different continents and ecosystems in the Arctic, and one of the longest migrations ever recorded for an arctic fox in such a short period of time," the Norwegian Polar Institute noted in a statement. —AFP

Man's best friend is a robot dog to some with dementia

CALIFORNIA: A robot dog under development in California is vying to be a best friend to people with Alzheimer's disease and other forms of dementia, offering comfort by responding to human touch with life-like motions. Entrepreneur Tom Stevens recently presented a test version of the robotic yellow Labrador puppy to residents of a nursing home in Thousand Oaks, California.

Stevens said his company Tombot, in the northern Los Angeles suburb of Santa Clarita, partnered with Jim Henson's Creature Shop, a firm founded by the late Muppets creator, to give the robot realistic movements. "It didn't just have to look real and feel realistic but it had to behave realistically as well," Stevens said.

Snow leopard cubs spotted at English sanctuary

LONDON: Two rare snow leopard cubs have taken their first steps outside their den to bask in the sun and creep through the leaves in a southern English sanctuary. The two as yet unnamed brothers are the first products of four

Stevens believes the Tombot dog, which moves its head from side to side, grunts and wags its tail, is lifelike enough to help people with dementia. It also is easier to look after than a real dog, he said. The robot has 16 motors to control its movements and is loaded with sensors to respond to voice commands and detect how people are touching it, such as the difference between a slow caress and a vigorous pet.

Stevens said he came up with the concept for the robot after his mother was diagnosed with Alzheimer's in 2011. "Of the many bad days that we had early on, by far the worst was when I had to take away her dog," Stevens said. His mother had "a beautiful two-year-old Goldendoodle" but Stevens said the dog ended up being aggressive towards her caregiver.

Japan's Sony Corp pioneered the use of robot dogs in 1999 with the AIBO, billed as a pet that behaves like a real dog using artificial intelligence. Unlike the AIBO, which looks robotic, the Tombots closely resemble real dogs. Stevens had a background in investing in robotics and he wondered whether the technology could help in providing companionship to people like his mother. His test version has the name "Jenny." The puppy cannot walk and is carried on a small bed. — Reuters

years of attempts to breed the endangered animals at the Kent centre and keep up the genetic diversity of the captive population.

"These guys are two very different boys. One is very bold and one is quite a bit shyer," said Briony Smith, head keeper at the Big Cat Sanctuary between the towns of Maidstone and Ashford. "One of them focused much more around play and the other one around eating and sleeping, but both are hitting targets that we would want them to hit and progressing absolutely beautifully." Smith and other staff have been keeping a close watch on the cubs and their mother Laila on CCTV cameras since they were born on April 26. —Reuters

Deep sea mining could destroy 'last frontier'

NEW DELHI: As India readies for the United Nations to give a green light to deep sea mining and boost its economy, the environmental group Greenpeace said yesterday that drilling the seabed could cause irreversible harm and worsen climate change. Without proper governance of the seas, mining could remove entire habitats and species, release toxins and create pollution in areas that have been undisturbed for millennia, it said.

"Deep sea mining could cause severe and