

## Environment News Futures

### Early Trilobites had Stomachs: New Fossil Study Finds

#### Remarkable Chinese specimens contradict previous assumptions about trilobite digestive systems and evolution

September 21, 2017—American Museum of Natural History

Exceptionally preserved trilobite fossils from China, dating back to more than 500 million years ago, have revealed new insights into the extinct marine animal's digestive system. The new study shows that at least two trilobite species evolved a stomach structure 20 million years earlier than previously thought.

### Solving the Easter Island Population Puzzle

September 20, 2017—Frontiers

Easter Island, known as Rapa Nui by its inhabitants, has been surrounded in mystery ever since the Europeans first landed in 1722. Early visitors estimated a population of just 1,500-3,000, which seemed at odds with the nearly nine hundred giant statues dotted around the Island. How did this small community construct, transport and erect these large rock figures?

A new study, published in the open-access journal *Frontiers in Ecology and Evolution*, hopes to unravel this mystery by giving the best estimate yet of the maximum population size sustained by Easter Island in its heyday.

“Despite its almost complete isolation, the inhabitants of Easter Island created a complicated social structure and these amazing works of art before a dramatic change occurred,” says Dr. Cedric Puleston, lead author of this study, based at the Department of Anthropology, University of



California, Davis, USA. “We’ve tried to solve one piece of the puzzle—to figure out the maximum population size before it fell. It appears the island could have supported 17,500 people at its peak, which represents the upper end of the range of previous estimates.”

## **Heat-loving Australian Ants Believe in Diversity, Hint 74 Species New to Science**

September 21, 2017—Pensoft Publishers

A genus of Australian ants, many of whose members prefer to forage in blistering temperatures of up to 50°C (122°F), is revised to include 74 new species. The ants include seed-eaters, ant and termite raiders, ‘honeypot ants’ that store nectar and honeydew, and numerous others whose biology is not yet understood. Some are bizarre: one species has eyes like inverted ice-cream cones.

## **Why Poison Frogs don’t Poison Themselves**

September 21, 2017—University of Texas at Austin

Poison frogs harbor some of the most potent neurotoxins we know, yet scientists have long wondered—how do these frogs keep from poisoning themselves? Scientists are now a step closer to resolving that head-scratcher. And the answer has potential consequences for the fight against pain and addiction.

## **Surprising Discovery: How the African Tsetse Fly Really Drinks Your Blood**

September 21, 2017—University of Bristol

Researchers have been taking a close-up look at the biting mouthparts of the African tsetse fly as part of ongoing work on the animal diseases it carries. Using a new high-powered scanning electron microscope, researchers were able to see the rows of sharp teeth and rasps that the fly uses to chew through the skin when it bites.

## **Desperate Rescuers Dig through Rubble after Powerful Mexico Quake**

NBC NEWS

The deadly earthquake toppled buildings in the heavily populated capital and forced thousands of people into the streets in panic.

## Blooming Lovely! Japan Zoo Names Baby Panda after Fragrant Flowers

Sep 25, 2017—AFP

Tokyo: A panda cub born in a Japanese zoo three months ago has been christened “Xiang Xiang” to evoke the image of a blooming flower, Tokyo governor Yuriko Koike said on Monday.

After showing a video clip of the baby panda being hugged by proud mum Shin Shin, Koike explained that the name Xiang Xiang—derived from the Chinese character for “fragrance”—was chosen from among more than 320,000 suggestions from the public. The naming of Xiang Xiang threatened to overshadow strong speculation that Prime Minister Shinzo Abe would call a snap election. It provided welcome light relief after weeks of tension over North Korean nuclear tests and missile launches.

## 255-year-old Great Banyan hasn't Stopped Growing

Sep 25, 2017—Jhimli Mukherjee Pandey | TNN

Kolkata: The oldest citizen of the city—the 255-year-old Great Banyan at the Indian Botanic Garden, Shibpur—is, well, greater than ever before. In fact, the garden’s grand old crowdpuller has increased its girth by a massive two acres in a little over 30 years, forcing its caregivers to create a larger boundary railing to hold it in.

In 1985, when a fence was installed around the tree, it covered an area of three acres. Today, 32 years later, so many prop roots have grown all around that the total area covered is five acres. So, a new fence had to be put around the energetic senior citizen. This new fencing has just been completed, though senior scientists in charge of the tree’s health are not sure how long this, too, will be relevant. The Botanical Survey of India, which is the guardian of the garden, has already nicknamed the Great Banyan ‘The Walking Tree’.

## Baby Orangutans Rub Noses in Greeting at Thai Wildlife Centre

Sep 13, 2017—Reuters

Ratchaburi Province, Thailand: Two baby Sumatran orangutans rescued by border officials who foiled a bid to smuggle them into Thailand arrived at a wildlife centre on Wednesday, to stay until Indonesia decides on their return, officials said.

Let out of their cage, the new arrivals rubbed noses with another pair of baby orangutans already resident at the centre. They received a bath before exploring their new surroundings, holding onto each other all the while. “Because they are still small, we have to keep these two inside a nursery enclosure as they need close attention,” said Banpot Maleehuan, director of the Khao Pratab Chang Wildlife Breeding Center in central Thailand.

The two-year-old animals, one male and one female, will live at the centre until a court case is completed and Indonesia decides whether to take them back, he added. The primates were among

a group of animals rescued in June at the Padang Besar customs checkpoint on the border with Malaysia, and a Malaysian national was arrested for attempting to smuggle them, media said. Orangutans, the world's largest tree-climbing mammals, are classified as critically endangered by the Convention on International Trade in Endangered Species (CITES).

They are native to Indonesia and Malaysia, and around 60,000 are left in the rainforests of Borneo and Sumatra, the World Wildlife Fund (WWF) estimates, down from around 230,000 animals a century ago. Deforestation and land clearing for pulp, paper and palm oil plantations has depleted the habitat of orangutans, which means "person of the forest" in Malay. Fires are often set by companies to clear the land.