

Huge bird-like dino found in China

The fossilized remains of a giant dinosaur have been unearthed in China.

Nature journal reports that the bird-like creature was 8m long, and only a young adult when it died. It had a beak, and weighed approximately 1,400 kg.



Scientists cannot yet determine what the creature might have fed on

Chinese researchers found the remains of the beast in the Erlian basin, a region of Inner Mongolia.

Initially thinking they had discovered a tyrannosaur, the researchers believe that the giant lived some 70 million years ago, in the late Cretaceous Period.

They believe that it is the biggest feathered animal ever uncovered.



The dinosaur was almost twice as tall as a man

Giant penguin discovered

Recently discovered in Peru were fossilized remains of a giant penguin.

Measuring 1.5m tall, the creature is believed to have lived 36 million years ago, a team of scientists discovered.



The penguin was taller than any penguin today

Known as *lcadyptes salasi*, the penguin would dwarf penguins alive today, including the Emperor and King penguins.

The well-preserved skeleton of the *lcadyptes* was found on the south coast of Peru, together with the remains of possibly four other unknown penguin species.

It was reported that the giant penguin preferred the warmer latitudes of the tropics at a time when temperatures were hotter than they are.



The ancient animal had a spear-like beak

New hominid finds in Ethiopia

Scientists in Ethiopia have uncovered hominid fossils, dating 3.9 million years ago, which may fill a gap in the story of evolution, they said.

The discovery of numerous complete jaws and other bones may connect two hominid species, including Lucy, and provide a better understanding of a period of early human evolutionary history.

Lucy is Ethiopia's famous hominid skeleton, unearthed in 1974 and dated at between 3.3 and 3.6 million years old.

Last year, scientists presented their find of fossils dating to 4.1 million years ago, including thousands of paleontological discoveries along the Great Rift Valley.

Lucy tour raises outcry

The oldest humanoid ever discovered, named Lucy, is on American tour that has drawn much disapproval.

Ethiopia, where Lucy was found, said that the 6-year tour would raise the funds for both old and new museums in the African country.

Archaeologists and the scientific community, however, argue that the more-than-3-million year-old remains are too fragile to be transported about.

Only twice were the original specimen exhibited publicly in Ethiopia itself.

There were reports that Ethiopian exiles in the US have launched an intense campaign against the Lucy tour of American museums (with New York, Denver and Chicago among the states in which the exhibition would be held).

The discovery of the fossilized partial skeleton of Lucy, a 1m tall adult, prompted a reconsideration of the theories, at that time, on early human evolution.

Reuters reported that some of America's most prestigious museums, such as the Smithsonian Institute and the American Museum of Natural History, have opted not to display the fossilized remains.

Well-known fossil hunter, Richard Leaky, criticized the Houston Museum of Natural Science for using Lucy as a "prostitute" to boost ticket sales, reports *AP*.

Moving Lucy out of Ethiopia also breaches a 1998 Unesco resolution that restricts the movement of such fossils out of their country of origin except for compelling scientific reasons.

Lucy, named after the Beatles song 'Lucy in the Sky with Diamonds', is not the oldest human ancestor ever discovered, but her skeleton is one of the most complete, with an estimated 40 per cent of her bones intact.

In the *AP* report, she was described as "not quite human" but "recognizable as something human". Lucy is believed to have weighed about 27.2 kg, and measured 1.1m tall.

Islamic art exhibition challenges perceptions

A new exhibition of Islamic art, 'The Spirit & Life', is being organised with the hope of changing the way people think about Islam.



A medieval bronze incense burner in the figure of a bird



A folio from the Akhlaq-i Nasiri, a treatise written by one of Iran's greatest ancient scribes, Nasir al-Din Tusi

Organisers of the show at London's Ismaili Centre hope that the exhibition and exhibits will generate a cultural dialogue and increase understanding about Islam in the West.

The exhibition brings together art from across the Muslim world that illustrate cross-cultural linkages and histories of rulers of different faiths who admired and respected one another's traditions.

Among the 165 objects on display are decorated musical instruments, paintings of princes hunting and scholars dancing, a miniature of a poet, and a page from of the world's most sumptuous Koran.

Hadrian gigantic statue found

Parts of the massive statue of the Roman Emperor Hadrian have been uncovered in Turkey.

Emperor Hadrian ruled Rome between AD117 and AD138, and was regarded as a great military administrator. He is also considered to be one of the 'five good emperors'.



The Hadrian statue is believed to have been created during the early period of his reign

The head, foot and part of a leg of the giant and exquisitely carved statue were excavated at an archaeological site in south-central Turkey.

Excavators are working on unearthing other parts of the statue, the original of which experts estimated to be 4-5m tall.

The found foot is 80cm long, while the leg measures almost 70cm long from just above the knee to the ankle. Also measuring 70cm is the head, which is intact except for its broken nose.

Remains of the huge monument were discovered among the buried ruins of a bath house about 5m below ground at the site of Sagalassos, an ancient mountain-top town.

A major earthquake destroyed the bath house between the late 6th and early 7th centuries AD.



Foot part of the carved statue

Originally, pieces were created and put together to form the monument, and when the building in the mountain collapsed, the parts fell on the floor of the devastated bath house as the statue broke along its joints.

The team of archaeologists from the Catholic University of Leuven in Belgium has also found marble toes which are linked to another monumental statue believed to be of Hadrian's wife, Sabina.

Missing link to whales found

According to fossil evidence, the whale descended from a deer-like mammal which lived 48 million years ago.

BBC News reported that remains discovered in the Kashmir region of India may have belonged to the fox-sized creature long linked to whales, dolphins and porpoises.

Researchers of the journal, *Nature*, suggest that the four-footed raccoon-sized animal lived on land but hid in water to escape predators or danger.

Key similarities in skull and ear structures have led to the belief that the shared anatomical features strengthen the evolutionary link.

DNA studies pointed to the hippo as a relative of modern whales, but their fossil record only appear some 15 million years ago, 35 million years after the cetaceans originated in South Asia



Whales may have evolved from small creatures

Previous scientific evidence showed that whales descended from land-based carnivores which fed on fish in the water but recent studies suggest that the land-dwelling ancestor to the whale might have been aquatic and a plank-eater.

Entire rainforest fossil found

A giant fossilized rainforest has been discovered in Illinois, US, *National Geographic News* reported.

The forest spans 1,000 hectares, and has been preserved by a major ancient earthquake. It lies inside a coal mine 300m below the surface near a town called Danville, and is filled with fossils of huge trunks of extinct trees, gigantic plants and large leafs believed to be 300 million years old.

Bearing little resemblance to wooded areas today, animal life in the rainforest was also extraordinary, although no animal fossils remain. According to scientists, dragon flies as large as seagulls, and millipedes 3m-long once inhabited the "lost world".

The earthquake buried the forest below sea level, encasing the whole ecosystem in mud, which provided a massive fossil record containing invaluable information on ancient forest, ecosystems and species.

Viking ship underneath a pub

You never know what can be under a 'watering hole'. On Merseyside, England, they found an ancient ship buried underneath the car park of a pub.

The 1,000-year-old Viking long ship was discovered beneath 2-3m of clay by the Railway Inn in Meols, Wirral. This is an area where Vikings are known to have settled.

Scientists believe that the vessel could be among the country's most important archaeological discoveries.

Penetrating radar equipment (GPR) was used to locate the ship in the ground.

Experts hope to carry out excavation and removal of the artefact for eventual exhibition in a museum.

Artefacts return to Peru

The US has returned over 400 Inca and pre-Columbian relics to Peru.

Stolen from many Andean countries in South America, and ending up in the US through the black market, the items are valued at millions of dollars. Police detained an Italian man for the trafficking.



Peru threatened legal action against the US over the ancient objects in 2006

The pieces include gold and silver jewellery, a cape made of macaw and parrot feathers, and a clay vessel of more than 3,500 years old.

In a separate move, Yale University has agreed to return thousands of Incan artefacts to Peru.

Over 4,000 items, such as mummies, ceramics and bones, are in the custody of the university, which has entered an agreement with Peru to co-sponsor the first travelling expedition of the collection.

The objects were excavated at Machu Picchu between 1911 and 1915 when history professor Hiram Bingham discovered thousands of artifacts, including silver statues, human bones and musical instruments.

In another arrangement, the Getty Museum of the US has made an agreement with the Italian culture ministry to return 40 priceless objects alleged to have been stolen from Italy.



Aphrodite, dated to the 5th Century BC, was allegedly taken out of Sicily illegally

A limestone and marble statue of the goddess, Aphrodite, is among the artefacts that will be back in Italy in 2010. Other items include fresco paintings, bronze sculptures and Greek vases.

For the past ten years, the Italian government has been resorting to the courts of law to suppress the international trafficking of ancient works of art.

Dr. Marion True, a former curator of antiquities at the Getty, one of the world's richest museums, has been tried in Italy on charges of conspiracy in the looting of ancient art works.



The items are estimated to be worth millions of dollars

The moves to send artefacts to their countries of origin convey an important message and reminder to grave raiders and archaeological thieves of the international agreement to take action against such crimes.

Museum unveils frozen mummy

An exhibition at the Museum of High Altitude Archaeology in Salta, Argentina, is displaying the mummy 'La Doncella' (The Maiden) for the first time.

La Doncella was 15 years old when she and two other children were sacrificed to the gods more than 500 years ago.

Entombed on the top of the Llullaillaco Volcano, and unearthed in 1999, their frozen bodies were among the best preserved mummies ever discovered.

The children, known as 'Los Ninos', were killed in a religious Inca ritual in which they were taken to the summit of the 6,700m mountain, placed in underground niches, and frozen to death.

In the exhibition, La Doncella is positioned in a sitting posture inside a glass case, in her brown dress and striped sandals, her long hair woven into fine braids, with bits of coca leaf on her lip and a crease on her cheek as her face leans against her shawl as if she's sleeping.

Scientists worked with the mummies in a special laboratory, the temperature of which could be lowered to -17°C, and to prevent thawing, never exposed them to higher temperatures for over 20 minutes at a time.



La Doncella on display in Argentina

Islamic comic book a hit

A comic book series, titled 'The 99,' has been taking Indonesia by storm since its launch recently.

The 68-page, full-colour book is gaining immense popularity, with merchandise, based on its superheroes, expected to be on sale soon.

Featuring 99 superhero characters, the series is based on Islamic culture, and seeks to serve as a metaphor for how the Islamic world is perceived and evolving.

Each super hero represents one of the 99 attributes of God in Islam, and all of them do not possess weapons, and are made up of an equal number of males and females.

Monet painting in museum damaged

A group of drunken intruders has broken into the Musee d'Orsay museum, and seriously damaged a Claude Monet painting.

Security camera captured four or five persons illegally entering the museum in Paris through a back door.

The gang fled when an alarm went off, after which it was found that the well-known painting, 'Le Pont d'Argenteuil' had been damaged, with a 10cm hole on it.

Claude Monet painted the piece in 1874, presenting a view of a bridge and boats along the Seine river.

Concerns about security at French institutes have been increased as a result of many recent incidents, including the attack on a Marcel Duchamp work at the Pompidou Centre; thief of four paintings the Fine Arts Museum in Nice; and lipstick marks left on an art work by Cy Twombly, in Avignon.

Unesco Asia-Pacific Heritage Awards

Unesco recently released a book, 'Asia Conserved: Lessons Learned from the Unesco Asia-Pacific Heritage Awards for Culture Heritage Conservation 2000 to 2004.'

The publication covers the rich architectural heritage in the region and best conservation practices carried out by sixty-four projects which won awards in the first five years of the programme.

The Unesco's awards programme recognizes achievements in the private and public sectors that conserve structures of cultural heritage value.

Since its inception, 281 entries of conservation projects from 23 countries have been received by Unesco. The projects are not restricted to places with religious significance, but include residential, commercial, office, and industrial buildings as well as gardens and bridges.

Visitors fall for Tate's crack

Two visitors fell into the hole which is part of an installation art work in the Tate Modern museum.

The pair was not seriously injured by the fall which happened while they were viewing Doris Salcedo's installation art of a 167m-long crack on the floor.

Named 'Doris' Crack', the installation has drawn 12,000 viewers on the first day of public viewing.

Symbolizing racial hatred and division in society, it starts as a crack, then widens and deepens as it spreads across the room in the London museum.

Japan's Atlantis

Stone formations near an island in Japan's Ryukyu archipelago may be the ruins of an ancient city.

The *National Geographic.com News* reported that Masaaki Kimura, a marine geologist at the University of the Ryukyus in Japan, believes that the submerged ruins beneath the waters off Yonaguni Jima belong to a Japanese 'Atlantis', which sunk about 2,000 years ago after an earthquake.

Kimura says that the monolithic structure rises like a stepped pyramid from a depth of 25m, and that he is convinced the remains are the 5,000-year-old lost city.

Other experts challenged the claim, insisting that the site is entirely natural, and pointed out that the Japanese government had neither carried out research nor recognized the significance of the site.

Kimura and other experts believe that the structures could be parts of Mu, a civilization well known in the fables of the Pacific, and said to have disappeared under the sea.

New museum to win Green certification

The new Grand Rapids Art Museum in Michigan, US, could become one of the first art museums in the world to receive the LEED certification from the US Green Building Council.

The LEED certification (Leadership in Energy and Environmental Design) is awarded to buildings that must accumulate a number of credits in categories such as site selection, construction materials, and energy and water use efficiency.

The Grand Rapids Art Museum was established in 1910 by women's clubs, and the building is a new structure located a few blocks from the previous one. It was constructed from 10 percent recycled materials, and uses recycled rainwater throughout the facility, for flushing toilets, plant irrigation, a pool, etc.. The vapour-misting air-conditioning system does not emit hydrochloro-fluorocarbons that deplete the ozone layer, and the museum site encourages access by public transportation.

Greece moves Acropolis sculptures

Ancient antiquities at the Acropolis in Athens are being moved to a new museum.

Thousands of objects from the 2,500-year-old Parthenon will eventually be transferred to a new home at the foot of the citadel. Most of these are marble sculptures from the fifth and sixth centuries BC.

The artefacts will be transported in styrofoam-filled crates made of plywood and metal, with the use of three cranes.

Built between 447 BC and 432 BC at the height of ancient Athens' glory, the Parthenon was a dedication to the city's patron goddess, Athena.

In 1687, a Venetian canon damaged the Parthenon when it was used as a gunpowder store by the Acropolis Turkish garrison.

Three giant cranes transfer hundreds of priceless statues and friezes to an ultra-modern museum below the Acropolis



Sex exhibition opens in London

An exhibition presenting a history of sex in art opened recently at London's Barbican Cultural Centre.



A terracotta mask illustrating an erotic scene

From ancient Roman marbles to contemporary hard-core images and videos, the show 'Seduced: Art and Sex from Antiquity to Now' depicts the changing representation of sexuality over time.

More than 50,000 visitors are expected to view a collection of about 250 works by over 70 artists.

The display includes Chinese paintings, Arabic and Indian manuscripts, Japanese engravings, Renaissance and baroque images, murals from Pompeii, and Roman and Greek objects.

Among the more famous artists whose pieces are part of the exhibition are Pablo Picasso, Francis Bacon, Gustav Klimt, Marcel Duchamp and Rembrandt.

Mona Lisa with lashes and brows

Leonardo da Vinci's 'Mona Lisa' originally had eye-lashes and eye-brows, says Pascal Cotte, a French inventor.

Mr Cotte revealed that his 240-megapixel scan exposed traces of facial hair removed by restoration efforts.

He also claimed that da Vinci reworked the position of Mona Lisa's left hand, and that originally, her face was wider, and her smile more expressive.

The world-famous painting on display today also lacks a blanket which the merchant's wife holds, as the scan showed.

Furthermore, Mr Cotte said that his analysis illustrated that light blue and white, rather than deep green, yellow and brown, were the original colours of the masterpiece.

US\$1m painting found in rubbish

A painting discovered dumped in a pile of rubbish on a New York street could be worth US\$1m.

The painting, 'Tres Personajes' (Three People), created by Mexican artist Rufino Tamayo in 1970 had been stolen 20 years ago from a warehouse where the owners had deposited while moving.

Four years ago, Elizabeth Gibson stumbled upon it while on a morning walk.

The widow of the original owner is selling it at a Sotheby's auction in November.

Ms Gibson will receive a percentage of the auction sale and a US\$15,000 reward which the rightful owners announced when it was stolen.

It remains unknown why and how the painting was left on the street.

53-million-years-old spider preserved in amber

A spider believed to be more than 50 million years old has been revealed in fine detail.

The ancient creature had been caught in amber in a lowland region close to Paris, France.

Scientists reconstructed the original appearance of the tiny insect, and digitally dissected it to present startling details, including internal organs.

This may point the way to revolutionize the study of fossils, and is the first time that very high resolution x-ray computed tomography, a medical imaging technique, has been used on a fossil in amber.

Birth of Rome myth boosted

Italian archaeologists have claimed that a deep cavern may lead to verification of the myth of Rome's birth, according to the *International Herald Tribune*.

The cavern is said to have been the place where Romulus and Remus were honoured as the founders of Rome.

Buried 16m under the palace ruins of Emperor Augustus on the Palatine Hill, the domed cavern is decorated with mosaics and seashells which were surprisingly well-preserved.

Romulus and Remus, sons of the god Mars, are said to have had been abandoned by the Tiber river banks, and were saved by a female wolf which nourished them until a shepherd, Faustulus, discovered the children, and took care of them.

The twin grew up, and eventually established Rome on April 21, 753 BC. Subsequently, Romulus murdered his brother in a power struggle.

Ancient scorpion larger than man

A fossilized claw found by British scientists may belong to the largest bug in the world.

The claw is believed to be part of an ancient sea scorpion which could be as long as 2.5m.

Its discovery in 390-million-year-old rocks suggests that insects, crabs, spiders and such creatures could be bigger in the past than previously estimated.

A paleontologist uncovered the fossil several years ago in a quarry near Prum, Germany. The area is thought to have had been an ancient estuary or swamp.



Drawing after a computer-generated image issued by the University of Bristol

A study, published online in the Royal Society's journal, *'Biology letters'*, illustrates that the giant scorpion was much longer than an average modern man before it became extinct.

Ancient trade network

A recent study shows that an extensive network in marine trade existed during prehistoric times, based on evidence of jade jewellery discovered near ancient burial sites all over Southeast Asia.

Mineral analysis reveal that a large number of artefacts dating back to almost 3000 BC are linked to a single site in Taiwan, indicating it as a source of supply of a unique variety of semi-precious stone to much of the Southeast Asian region.

As one of the biggest trading networks at the time, it strengthens the theory that the inhabitants in the area had sophisticated sea vessels and vast communication earlier than estimated before, suggesting that the regional cultures were more advanced than experts thought.



A specimen of "Lingling-o" earring discovered in Vietnam and the Philippines which used a distinctive kind of jade found at a single site in Taiwan

Forty-nine sites in Malaysia, the Philippines, Vietnam and Thailand yielded objects that were included in the study. The researchers

examined 144 jade artefacts, most of which had been buried in jars or placed beside skulls of prehistoric skeletons.

Massive excavation of Vietnam's "Capital"

Archaeologists from the Vietnam Institute of Archaeology have been, for the past five years, excavating Thang Long, an ancient capital, reports *Science Times*.

Millions of objects and features of building over a thousand years old were unearthed. So far, only one percent of the site has been excavated.



A great number of ceramics have been unearthed at Thang Long

Thang Long is a site within Hanoi that is more than 18.9 km². It was declared the capital of the Ly Dynasty in 1010.

It is now considered the biggest archaeological excavation in the history of Southeast Asia.

Excavators uncovered the foundations of no less than eleven palaces, pillar bases, deep

wells, brick roads and drainage systems under the surface between one and four metres. They also found a dried riverbed containing the largest collection of ceramics in the country.

Lion sculpture fetches record price

A limestone lion carving has been auctioned for US\$57m in a record sale for a sculpture.

The tiny (8.3cm) 'Guennol Lioness' is believed to have been created 5,000 years ago in Mesopotamia.



Guennol Lioness

It was discovered at a site close to Baghdad (in what was then Mesopotamia), which is known as the "cradle of civilization" due to its development of agriculture, animal herding and domestication some 8,000 years ago, earlier than anywhere else.

Located between the Tigris and Euphrates rivers, Mesopotamia has been credited with the creation of the wheel, a written script, monumental architecture and the first cities.

In the previous record sale for a sculpture, Pablo Picasso's 'Tete de Femme' was sold for US\$29m.

Saving Ancient frescoes

Restorers are painstakingly salvaging thousand-year-old frescoes in a sandstone cavern in China.

The frescoes are part of the Magao Grottoes Buddhist mural complex in the remote Gansu region.

Among the world's greatest collections of Buddhist art, they cover 45,000 square metres, and are 1,650 years old and crumbling.

A current problem leading to the deterioration is the sheer number of visitors, 7,000 a day, who contribute to the rise in levels of carbon dioxide, temperature and humidity.

Protective measures taken include organizing smaller group visits, and prohibiting the use of cameras. At the same time, technicians are carefully extracting salt from the minerals in the walls, among other delicate restoration work.

Making ethnic music 'pop'

A Thai music producer has embarked on a mission to popularize ethnic music in Asia.

Pongprom Snitwong Na Ayuthaya, an executive of the famous Butterfly Records in Thailand, has travelled to various parts of Asia, recording

music that few outside its place of origin have ever heard.

From several small villages, he has documented music sung by local folks, and uploaded them on his website (www.siameseproject.co.th)

The music collection includes songs from the Yunnan province of China; chants by Buddhist nuns in a temple in Bhutan; lullabies performed during traditional rituals in remote villages of Laos and Thailand.

Pongprom is also involved in producing books on ethnic Asian music, and a television documentary. He believes that popularity and a mass audience are the best ways to preserve traditional music.

New finding reveals a larger Angkor City

Cambodia's ancient Angkor Wat temple was once at the centre of an extensive urban settlement, satellite evidence show.

An international team, using Nasa satellites, have found about 74 new temples and complex irrigation systems. The radar images distinguished the contours of the terrain under the surface of the earth, and located roads, canals and ponds surrounding the temples.

A new and detailed map of the area, published in the *PNAS* Journal, enlarges the settlement by 6,000 sq km, approximately three times larger than was known.

The map was made from ground surveys, airborne photography and ground-sensing radar.

Analysis also further supports the hypothesis that the development of the sprawling city contributed to its expansion into the surrounding forests, environmental degradation and ultimately the demise of the city.

The researchers discovered that the water supply to the city, believed to have contained half a million people, depended on a single complex channel, providing water for farming, in particular intensive rice agriculture.

Over time, the system collapsed, and along with deforestation, overpopulation and topsoil erosion, compounded the problems for the Angkor empire, whose complex was too vast to manage.

The team believes that the medieval Khmer Kingdom, which ended in the 14th century, covered 3,000 sq km, and was the largest pre-industrial complex of its kind.

Its closest rival, the Tikal Mayan city in Guatemala, covered about 150 sq km.

The *International Herald Tribune* reported that excavations are planned at Angkor to obtain more information on ecological problems that caused the downfall of the great Cambodian city.

Illustration by

- Pattanapong Varanyanon (page 40 to 43)
- Sakulchat Chatrakul Na Ayudhaya (page 44 to 53)